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ABSTRACT

This document contains a project report and tutor manual from a demonstration project conducted by the Fayette County Community Action Agency (FCCAA) of Fayette County, Pennsylvania to evaluate the effectiveness of using computers and selected reading software in conjunction with traditional one-on-one tutoring to teach reading skills to undereducated adults. The report describes the following project activities: (1) a draft curriculum for a tutor-assisted computerized reading instruction program for adults curriculum was developed and reviewed by FCCAA faculty and students; (2) literacy software (EDL Reading Strategies Software) was purchased and installed at the computer laboratory at the Fayette campus of Penn State University and at FCCAA's existing computer laboratories; (3) FCCAA developed and implemented a 10-hour program to train volunteer tutors to use the literacy software and 51 adult students participated in the computer-assisted instruction with their volunteer tutors; (4) the curriculum and handbook were revised. All the tutors preferred the computerized method of instruction over traditional tutoring with textbooks, and 93% of the students surveyed were satisfied with the computer-assisted instruction they received. Appended are the following: original instructions for EDL software; tutor data form, agendas, and log; adult attendance record; and results of ERIC literature search. The computer literacy manual for volunteer tutors contains the following: history and anatomy of personal computers and diskettes, WordPerfect commands, guide to using EDL software, glossary, and 10 references. (MN)

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COMPUTER ASSISTED READING INSTRUCTION FOR THE ADULT LEARNER

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ED 405 510

A 353 SPECIAL DEMONSTRATION PROJECT #99-6011
$5,000
FUNDED BY THE PENNSYLVANIA DEPARTMENT OF EDUCATION
JULY 1, 1995 TO JUNE 30, 1996

AUTHORS

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ABSTRACT PAGE

Title: Tutor Assisted Computerized Reading Instruction for the Adult Learner

Project No: 99-6011 Funding: $5000.00

Project Director: Mr. James Stark Phone #: 412-437-6050

Contact Person: Ms. Kim Hawk Phone #: 412-437-6050

Agency Address: 137 North Beeson Avenue, Uniontown, PA 15401

Purpose: FCCAA established a computer literacy center at Penn State, Fayette Campus, and developed a curriculum for volunteer tutors to teach reading skills to under-educated adults. This project supplemented the computer assisted learning currently offered by FCCAA in computer learning centers in Connellsville, Uniontown, and remote sites (via notebook computer). The Penn State Computer Center provided the much needed additional computer resources to our corps of volunteer tutors and provided the much needed flexibility of hours.

Procedures: (1)Research was conducted at the Western Pennsylvania Adult Learning Resource Center and a computerized search of ERIC and the Internet was conducted. (2) A draft copy of a curriculum and handbook was written and reviewed by FCCAA faculty and students. (3) Literacy software was purchased and installed at the computer laboratory at Penn State Fayette campus and at FCCAA's existing computer laboratories in Connellsville and Uniontown, PA. (4) FCCAA developed and implemented a 10 hour tutor training program in reference to software and 51 adult students participated in the computer assisted instruction with their volunteer tutors. (5)Tutors used computer aided instruction in their tutoring of under-educated adults. (6) Additional revision and refinement was made to the curriculum and handbook. (7) FCCAA monitored progress, made adjustments and developed an evaluation.

Summary of Findings: The final surveys administered indicated that FCCAA surpassed the predicted results. 90% of the tutors trained indicated that they had no computer experience at all, the 10% surveyed who had used personal computers were FCCAA staff members who participated in the project. None (0%) of the tutors trained had ever used EDL Reading Strategies Software. 100% of the tutors surveyed in post-training surveys preferred the computerized method of instruction as compared to traditional tutoring using textbooks. The computer assisted instruction provided students and tutors with a sense of accomplishment which was indicated by the surveys administered. 93% of the students surveyed were satisfied with the computer assisted instruction. The remaining 7% of the students found the computer assisted instruction to be"confusing" or "too

fast". 85% of the students tested achieved a two grade level increase in reading skills, 4% achieved a three grade level increase, 9% achieved a one grade level increase in reading skills and 2% were referred to Fayette County Association for Retarded Citizens for more specialized remediation. FCCAA surpassed it's projected goal of 75% of students will attain a 2 grade level increase in reading rate by 10% 89% of the students who participated in the project met or surpassed their goal.

Comments (Conclusions, Findings, Barriers, if any): FCCAA found that the use of technology in conjunction with traditional one-on-one tutoring was extremely well received by project participants. It was necessary; however, for FCCAA to supplement the EDL Reading Strategies Software purchased for the project with some lower reading level software borrowed from the Adult Education resource Center in Gibsonia in order to meet the needs of some of the lower functioning participants. FCCAA had anticipated recruiting students reading at a 5th grade level for the project. It was found that the average reading score of participants was 3.0 and, that the software purchased was too advanced for these participants. Adjustments had to be made to meet the needs of the lower functioning participants.

It was found that tutors and students wanted the technical support provided by holding group tutoring sessions as compared to meeting one-on-one at the computer laboratory. Feedback was provided immediately, by FCCAA staff during these group sessions, which the tutors found to be very valuable. Retention and attendance improved as a result of the group sessions and FCCAA is continuing to hold the group sessions on an on-going basis as a result of this project. The public computer laboratory at Penn State Fayette Campus is available for tutors and students to use at their own convenience and continues to provide a central location for computerized tutoring.

Products (if applicable): FCCAA produced a handbook and curriculum for use by volunteer literacy tutors in conjunction with EDL Reading Strategies Software.

Descriptors (To be completed only by Bureau staff):

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The purpose of this manual and curriculum is to provide Literacy Tutors and students, with little or no computer knowledge, an easy to understand guide to the use and operation of personal computers and selected reading software for use in tutoring adult literacy students. It is hoped that, through the use of technology, retention and learner gains in literacy programs will be improved as well as an increased sense of self-esteem for tutors and literacy students who are usually intimidated by unfamiliar technology.

The first section deals with the history, common uses and parts of a personal computer. Tutors and students are provided with a blank computer keyboard for practicing, basic WordPerfect commands and instructions for word processing.

The manual progresses to cover testing and implementation of EDL's Learning 100 Reading Strategies Software. Instructions are presented in an easy-to-read and understand format designed to foster self confidence, in tutors and students, in the use of personal computers. Step-by-step instructions are included for use of the software, how to access the computer network at Penn State Fayette Campus, and how to use the student management program built into the software. The final section of the manual is a glossary of commonly used computer terminology for use as a reference by literacy tutors and students.

D. INTRODUCTION

PURPOSE/OBJECTIVES OF THE PROJECT

In response to the small grant proposal priority (C.1.A.) special mini grant Fayette County Community Action Agency, Inc. (FCCAA) requested $5000.00 of section 353 funds for a demonstration project evaluating the effectiveness of the use of computers with selected reading software in conjunction with traditional one-on-one tutoring. This method of learning incorporates the use of technology in teaching Literacy students with the intent of: producing a "user friendly" curriculum and outline in an easily understandable format for tutors and students with little or no computer skills, increasing attendance in Literacy classes, increasing learner gains in reading rate through the use of technology, and to provide training in basic computer skills to tutors and literacy students. Funds were used to establish a computer literacy center at Pennsylvania State University Fayette Campus and to develop a curriculum to assist volunteer tutors in teaching Reading Skills to undereducated adults. This computer literacy center was intended to supplement the computer assisted learning centers in Connellsville, Uniontown, and remote sites (via notebook computers). This curriculum would also be disseminated to other adult education providers for use in other programs throughout the state.

FCCAA maintains computer learning centers at the Education Center in Connellsville, and at three sites in Uniontown. The purpose of equipping a computer learning center at Penn State

Fayette Campus provided much needed additional computer resources to our core of volunteer tutors and it also provided the needed flexibility of hours. Our existing sites are very busy and are only available during traditional business hours. The Penn State site is available to tutors and students in the evening as well as during daylight hours. Additionally, the Penn State facility is centrally located in the county as opposed to Uniontown and Connellsville which are in the south and north parts of the county respectively. Like the existing computer learning centers, the Penn State facility is also handicapped accessible.

This project also met the needs of volunteer tutors in utilizing computer assisted instruction. In the past volunteer tutors had been apprehensive to use the learning centers, primarily due to being uncomfortable with the use of computers and technology. This curriculum was developed to provide tutors with instruction towards teaching a competency in reading literacy and also basic computer instruction. Traditional computer manuals are hard for a person with little or no computer knowledge to interpret on their own. The curriculum and outline developed by FCCAA education staff was intended to bridge this communication gap by providing step-by-step instructions in the use of: computers, reading software, and Wordperfect 5.1. This benefitted the tutor because he/she gained valuable computer skills as well as hands on instruction in tutoring reading.

During the eight years FCCAA had provided computer instruction

to adult learners, it was found that conventional computer instruction manuals were written at a reading level and a format that was unintelligible to even advanced level readers. The tutors and adult learners often became frustrated when faced with any problems that related to computer usage and rarely resorted to consulting the difficult-to-understand computer manual. The adult learner advances rapidly if an environment where success is perceived to be attainable and the tutor/instructor is confident. FCCAA had found that in tutor-student computer instruction, continued failures, lack of understanding and other frustrations resulted in a high drop out rate, slower progress or an avoidance of the computer entirely--all of which translated into a reduced academic attainment and employability.

FCCAA developed a curriculum in the form of a handbook for tutors to retain as reference. The handbook began with an overview of the history of computers, parts of a personal computer, and fundamental computer terminology. The curriculum advances incrementally to include specific instruction in the operation of selected reading software, Wordperfect 5.1 and how to enter a computer network. It is anticipated that this reading competency and knowledge of basic computer skills will provide students with skills that will help them be more competitive in today's job market in addition to gains in reading rate and increased self-esteem. Also included is instruction in the Learning 100 Software by Educational Development Laboratories (EDL). This software was

chosen because of its flexibility, user friendliness, and its ease in determining and monitoring reading level progress. These facts were determined through a computer search of ERIC, research conducted at the Western Pennsylvania Adult Literacy Resource Center in Gibsonia, research conducted on the Internet, and eight years experience in providing computer assisted literacy/GED instruction.

This curriculum was designed to aide tutors in utilizing the selected reading software, assist in tracking each student's progress through the program and to provide one-on-one assistance in reading instruction and the use of computers to students.

Tutors participated in ten hours of training classes held at Penn State and CAEC prior to working with the students to familiarize themselves with the software and manual and to insure quality instruction. The tutors met with students once a week, at each pair's convenience, to and implement Individual Education Plans (IEP's). IEP's for the students were developed by the FCCAA instructional staff in order to meet each student's educational needs and stated work goals.

As proposed, the curriculum addressed specific problems associated with existing manuals - advanced literacy levels, confusing rhetoric and the student's need for supervision while learning and operating software. FCCAA has had previous success in producing handbooks and manuals through 353 projects. Projects in the past three years include: "The College and Technical

Handbook", "The GED Success Book", "The ESL Cookbook", and "The Anthology of Inmate Art".

(time frame)

FCCAA staff developed the Tutor Data Form as a pre- training survey and began recruiting volunteer tutors in August, 1995. Volunteer tutors were also recruited, on an on-going basis by FCCAA staff, out of existing Adult Education and Training Programs. College level student tutors were recruited at Penn State Fayette Campus, beginning in December, 1995, with the cooperation of the Penn State Continuing Education Department. Laubach Literacy Action Certification Training was made available to participating Penn State Fayette Campus students as part of this project. The EDL Learning 100 Reading Strategies levels EA (5.0-6.5), GA (7.0-8.5) and IA (9.0-10.5) were purchased, by FCCAA in September, 1995, for installation in the existing FCCAA computer laboratory's and at Penn State Fayette Campus' Public Computer Laboratory. In October, 1995, work was begun on the first draft copy of the handbook and curriculum designed to accompany the reading software. The first draft was submitted to the handbook committee for revision and suggestions and the re-writing process was started in November and December, 1995. During this time period, FCCAA staff began recruiting students to participate in the Tutor Assisted Computerized Reading Instruction for the Adult Learner project. The response to the project was very positive. Student's surveyed had little or no computer experience and were very eager to learn

more about computers. None of the participants had ever participated in a project of this type and were very anxious to work on personal computers.

It was found, after conferring with Penn State's Network Administrator, that the stand alone versions of the EDL Software were not appropriate for installation on the Penn State Network. FCCAA staff member, Susan Cowan, contacted Mr. Edwin Harris of Steck/Vaughn-EDL, in January, 1996, to inform him of the problem with installing the software at Penn State and asked for suggestions as FCCAA did not have the funds to purchase the additional software. Mr. Harris was very interested in the project and was extremely helpful. EDL donated the Network version of the software for use in the project on the condition that the software be returned when the project was completed. FCCAA is extremely grateful for the assistance and has installed the Network Version of the software at Penn State Fayette Campus. Without Mr. Harris' and EDL/Steck/Vaughn's cooperation FCCAA staff would not have been able to use the fully equipped teaching laboratory at Penn State Fayette Campus to hold the large tutor training sessions nor would project participants have been able to access the reading software in the Public Lab. The Network version of the software was installed at the Penn State Computer Laboratory in January, 1996.

The first tutor training session was held on October 7, 1996, with 13 tutors in attendance, the second session was held February 16, 1996, at Penn State Fayette Campus, with 25 tutors in

attendance. A third tutor training session was held on February 23, 1996 (see agendas), with 8 tutors in attendance. This session was intended to familiarize volunteer tutors with the EDL Learning 100 Software, train tutors to enter the Network, and to show tutors how to use the student management system which is part of the Learning 100 program. The fourth training was held at Penn State Fayette Campus on April 14, 1996, with 10 tutors in attendance. A report on the project and the use of Online Action Research in an adult education classroom was presented in May, 1995, at the National Conference on Adult Basic Education (COABE) in Pittsburgh by, Susan Cowan, FCCAA staff member developer of the manual and curriculum.

Technical support was provided to tutors and student participants by FCCAA staff holding group tutoring/learning sessions at the Penn State Fayette Campus Public Computer Laboratory on Tuesday evenings from 6:00 to 8:00pm from April 14, through June 11, 1996. Participants, both tutors and students, enjoyed the group sessions and found the on-site technical assistance to be extremely helpful in furthering their basic computer skills. Group tutoring/computer sessions are held on Tuesday afternoons from 3:00 to 4:30 at a classroom located in the Community Service Center, 137 North Beeson Avenue, Uniontown.

Staffing

This project was under the supervision of the FCCAA Executive Director, James M. Stark. Mr. Stark has over 20 years experience in human services, has completed course work for a Doctorate in

Public Policy Analysis and has a Master's in Public Administration. The CAEC Director of Education, Kim Hawk, coordinated activities for the project. Ms. Hawk has 10 years of Adult Education teaching experience and has a BS in Education. FCCAA staff member, Susan Cowan, has a Master's Degree in Education and has worked in Adult Education for four years. Ms. Cowan designed and implemented the curriculum and handbook for the project and conducted the tutor training workshops at Penn State Fayette Campus.

The final report of the Tutor Assisted Computerized Instruction for the Adult Learner is available at the following locations:

Pennsylvania Department of Education
333 Market Street
Harrisburg, Pennsylvania 17126-0333

AdvancE
333 Market Street
Harrisburg, Pennsylvania 17126-0333

Community Action Association of Pennsylvania
222 Pine Street
Harrisburg, Pennsylvania 17101

Fayette County Community Action Education Center
201 East Fairview Avenue
Connellsville, Pennsylvania 15425

(II) GOALS AND OBJECTIVES

1. FCCAA will equip a computer learning center at Penn State Fayette Campus with adult literacy software.

2. FCCAA will develop an easy to understand curriculum for volunteer tutor literacy instruction of which 150 copies will be printed.

3. FCCAA will develop and implement a 10 hour Tutor Training Program to familiarize Tutors with the software and reference handbook to be used in the project. This will be offered six times during the year for a total of 50 volunteers.

4. 50 adult students will participate in the computer assisted instruction with their volunteer tutors.

5. FCCAA will evaluate the impact of this project via tutor/student evaluations and student pre- and post- testing. FCCAA predicts that 80% of the students participating in the program will be satisfied with this method of learning; 75% of the students will achieve a two grade level increase in reading skills; and 65% of the volunteer tutors will prefer this method of instruction.

C. PROCEDURES

A. GENERAL DESIGN - This project met the needs of the Commonwealth's priority (C1a) to develop a technology plan and to disseminate the curriculum plan for use by other adult education providers in the state. Other adult education providers will be provided with a literature review, the tutor computer guidebook, instructions on how to implement the program and an evaluation of the project which includes recommendations for improvements should the provider chose to utilize the system.

The curriculum facilitated the use of computers in adult literacy instruction and was designed to instruct tutors and students in the basic computer operations necessary to use the selected reading software. The curriculum provided guidelines

to tutors for instruction, use of the software and maintenance of the student's IEP in order to attain their stated employment goals.

The following procedural sequence was employed to develop the curriculum and handbook:

1. A review of literature on computer instruction and software and its use in adult education was conducted at the Western Pennsylvania Adult Learning Resource Center and a search of ERIC was conducted along with other informational sources such as the Internet.
2. A draft copy of the curriculum and coordinating handbook was written and reviewed by FCCAA faculty and students.
3. Literacy software was purchased and installed at the computer learning center at Penn State Fayette Campus and at FCCAA's existing computer laboratories in Connellsville and Uniontown, PA.
4. Six 10-hour training classes for tutors were conducted.
5. Tutors used computer aided instruction in their tutoring of under-educated adults.
6. Additional revision and refinement was made to the curriculum and handbook.
7. FCCAA monitored progress and developed an evaluation.
8. FCCAA will disseminate the handbook and final evaluation report to the Pennsylvania Department of Education and other adult education providers in the state.

d. Which objectives were met and how (positive results)?

The first objective was to equip a computer learning center at Penn State Fayette Campus with adult literacy software. FCCAA staff met with the Continuing Education Department at Penn State Fayette Campus, in September, 1995, to discuss a collaborative effort in establishing a computer literacy center on campus. This successful collaboration resulted in FCCAA Literacy Tutors and students in having access to the public computer laboratory at Penn State Fayette Campus. FCCAA staff member, Susan Cowan, contacted EDL Executive Director, Edwin Harris, regarding the possibility of EDL's participating in the project by contributing technical assistance and the Networking Version of EDL's Learning 100, Reading Strategies software. FCCAA had already purchased the stand alone version of Learning 100 for installation in the two existing FCCAA computer laboratory's at the Connellsville Education Center, 201 East Fairview Avenue, Connellsville, PA and at the Community Service Center, 137 North Beeson Avenue, Uniontown, PA. EDL's participation enabled FCCAA to provide a centrally located computer literacy center at Penn State Fayette Campus.

The second objective was to develop an easy to understand curriculum for volunteer tutor literacy instruction. FCCAA developed a Computer Assisted Tutor Handbook for Literacy Instruction which included; Word Perfect 5.1, background and history of computers, easy to understand operating instructions for the EDL Learning 100 software, easy to understand instructions for

using the computer network at Penn State Fayette Campus, a glossary of computer terminology, EDL pre- and post- testing and evaluation materials and instructions for use of the EDL student management program. Research was conducted at the Adult Literacy Resource Center in Gibsonia, an ERIC search of current publications and research was conducted via the Internet for the project. The first draft copy was submitted to a committee consisting of; students enrolled in FCCAA education and training programs, FCCAA Education Department staff members, FCCAA Director of Education, Kim Hawk and FCCAA Executive Director, James Stark. This version of the handbook was used in the initial tutor training sessions and feedback was solicited from participants regarding readability, ease of use and organization. A second draft was begun in March, 1996 utilizing feedback provided by the committee. The third objective was for FCCAA to develop and implement a 10 hour Tutor Training Program to familiarize Tutors with the software and handbook used in the project. This training was to be offered six times during the year for a total of 50 volunteers. FCCAA held four of the six planned tutor training sessions. Two sessions were to be held in January and February, 1996; however, due to the extremely inclement weather two sessions had to be canceled.

FCCAA staff developed a 10 hour training program which was broken down into two sessions. A four hour session which consisted of: a one hour session on, "Adult Literacy/Sensitivity", three hours of training on: The Evolution of and uses of personal

computers, Anatomy of a personal computer, Anatomy and Care of a diskette, and a Hands-on Wordperfect tutorial. The second workshop lasted for six hours and provided hands-on instruction in; The use of EDL Reading Strategies Software, Using the Student Management Program, Recording and Reporting student progress, and Technical Assistance. The use of the large teaching computer laboratory at Penn State Fayette Campus greatly facilitated the training process; because, a larger number of volunteers were able to be trained. FCCAA met its projected tutor training goal of 50 volunteers.

Objective four was for 50 adult students to participate in the computer assisted instruction with their volunteer tutors. Fifty-one adult students participated in the computer assisted instruction during the course of the project. FCCAA's Education Department has incorporated the Computer Assisted Literacy Instruction Handbook, curriculum and the Reading Strategies Learning 100 software program into the existing Adult Literacy Program and the trainings are to continue on an on-going basis.

The fifth objective was; for FCCAA to evaluate the impact of the project via tutor/student evaluations and student pre- and post- testing. FCCAA predicted that 80% of the students participating in the program would be satisfied with this method of learning, that 65% of the volunteer tutors would prefer the new method of instruction and that 75% of the students would achieve a two grade level increase in reading skills. The final surveys administered indicate that FCCAA surpassed the predicted results.

According to pre-training surveys, developed and administered by FCCAA staff to volunteer tutors, 90% of the tutors trained indicated that they had no computer experience at all, the 10% surveyed who had used personal computers or who were familiar with WordPerfect 5.1 were FCCAA staff members who participated in the project. None (0%) of the tutors trained had ever used the EDL Reading Strategies Software. 100% of the tutors surveyed in post-training surveys preferred the computer assisted instruction used in conjunction with Laubach Literacy Materials as compared to one-on-one, traditional tutoring using only textbooks. The computer assisted instruction provided students with a sense of accomplishment which was indicated by the student surveys administered. 93% of the students surveyed were satisfied with the computer assisted instruction. The remaining 7% of the students found the computer assisted instruction to be "confusing" or "too fast". It must be noted that the students who were not as satisfied with the computerized instruction, were tested at a much lower functioning level that the 93% who preferred the use of technology. 90% of the tutors surveyed were already Laubach Literacy Action Certified Tutors before the start of the training, the remaining 10% were Laubach certified during the course of the training by FCCAA's Laubach Literacy Action Certification Trainer, Kim Hawk. 85% of the students tested achieved a two grade level increase in reading skills, 4% achieved a three grade level increase, 9% achieved a one grade level increase in reading

skills, and 2% were referred to Fayette County Association for Retarded Citizens for more specialized remediation. FCCAA surpassed it's projected goal of 75% of students will attain a 2 grade level increase in reading rate by 10%. 89% of the students who participated in the project met or surpassed their goal.

e. The objectives which were not met by FCCAA during the course of this project were: (Objective 3) FCCAA was not able to offer the 10 hour Tutor Training Program six times during the project year to a total of 50 volunteers, due to the extremely severe winter weather conditions. Fayette County has no available public transportation and the severe weather prevented many of the enrolled tutors and students from attending the six trainings as scheduled. The use of Penn State's large teaching laboratory for the initial trainings greatly facilitated the project. FCCAA staff were able to train larger numbers of volunteers at each session and the goal of training 50 volunteer tutors was met due to access to this facility. FCCAA's Education Department also has incorporated the Computer Assisted Training Program into the existing Laubach Literacy Action Education Program and will be presenting the training program on a regular basis on an on-going basis. 51 students participated in the Computer Assisted Instruction and 93% were satisfied with this method of learning.

f. The evaluation instrument(s)/technique(s) used and the results of the evaluation(s).

FCCAA Education Department staff first wished to determine how many of the tutors recruited for the project had experience at operating a personal computer, how many were familiar with Wordperfect 5.1, which of the three training sites was the most convenient, and how many of the tutors recruited were already Laubach Literacy Action Certified. A Tutor Data Form written survey was developed and administered as a pre- training evaluation by FCCAA staff. Results of the survey indicated that 90% of the tutors recruited had no computer experience at all and were not familiar at all with Wordperfect 5.1. The 10% of tutors surveyed who had used Wordperfect 5.1 and were familiar with the use of a personal computer were FCCAA Education Department staff who were participating in the project. 93% of the tutors surveyed were already Laubach Literacy Action Certified Tutors. The 7% of tutors who had not been certified in the Laubach Way to Reading were certified during the training by FCCAA's Laubach Certification Trainer, Kim Hawk, Director of Education.

Interviews conducted at the end of the training sessions indicated that 100% of the volunteer tutors preferred the new method of instruction. Tutors indicated that the use of technology facilitated the tutoring/learning process and provided a sense of accomplishment to both tutors and students who had not previously operated a personal computer. The use of the Penn State Fayette

Campus laboratory was indicated to be a very positive experience, tutors and students enjoyed the use of the state-of-the art teaching laboratory at Penn State. Attending classes in a college setting was a new experience for most of the participants and the surveys indicated that the overall experience was valuable. Tutors who participated in the training said that, "Computers are Fun".

Students who participated in the project were pre-tested using the Wide Range Achievement Test (WRAT), which FCCAA uses in its existing literacy programs and by using the EDL Entry Level Placement Test which is part of the Reading Strategies curriculum. Volunteer tutors received training in administering the EDL placement tests and testing materials were included for the tutor's use in the Handbook which was developed for the project.

The students pre-tested with a wide range of reading levels from 1st to 6th grade with an average score of 3rd grade. The recorded scores were much lower than had been anticipated when the project was being planned and the reading software purchased. Students were post-tested at the end of the training using the WRAT test and EDL testing materials. 85% of the 50 student participants achieved a two grade level increase in reading levels by working with tutors in group and individual sessions twice weekly for a four month period. 4% of students gained a three level increase in reading skills. 9% of the participants gained a one level increase in tested reading rate and 2% were referred by FCCAA staff to Fayette Co. Association for Retarded Citizens for more

specialized assistance. FCCAA has incorporated the curriculum into the existing Literacy Program and remediation is continuing on an on-going basis with students who need more time and attention to attain the projected two grade level gains in reading level. It was found, after the training started, that the levels of software purchased for the project were too difficult for some of the participants who were functioning at a 0-1.5 reading level. FCCAA staff borrowed a lower level (2.0) of EDL Learning 100 Reading Strategies software from the Adult Education Western Resource Center in Gibsonia for use in the project.

g. The procedure for the dissemination of the findings and the product(s).

The final report on the effectiveness of the Tutor Assisted Computerized Instruction for the Adult Learner will be submitted to AdvancE the Pennsylvania Department of Education, The Pennsylvania Director's Association for Community Action, and the Adult Division of the Fayette County Human Service Council.

Conclusions:

FCCAA will continue to tutor students using the 10 hour " Tutor Assisted Computerized Instruction for the Adult Learner" curriculum and handbook in addition to the Laubach Literacy training traditionally offered by FCCAA, Inc. Students will also have the option of attending a weekly literacy class that is

available at the CAEC and the Community Service Center, Uniontown. The group sessions have been extremely popular and FCCAA's Education Department has been able to maintain students and tutors in an active status because of the popularity of the group computerized sessions. It was also found that volunteer tutors wanted the additional technical support provided by FCCAA Education Department staff at the group sessions.

Tutors found the EDL Learning 100 Reading Strategies Software easy to use and understand once they were into the program. Only 10% of the tutors involved in the project had any computer experience initially and post-project surveys indicated that tutors felt that they were much more comfortable with the use of technology after the training sessions. FCCAA staff found it necessary to borrow additional, lower level software from the Adult Literacy Resource Center in Gibsonia as the levels purchased proved too difficult to effectively meet the needs of the literacy students that were recruited for this project. FCCAA had projected that they would be training students reading at an approximately 5th grade reading rate; however, the average reading score of participants in the project was 3.0. FCCAA recommends that trainers interested in utilizing the EDL Software package start out with the lowest levels of software available and to plan on incorporating group sessions along with individual tutoring to provide support and technical assistance.

APPENDICES

GETTING STARTED WITH READING STRATEGIES SOFTWARE, V 5.00 HARD-DRIVE VERSION

PROGRAM OVERVIEW

Reading Strategies software provides practice and reinforcement of reading comprehension skills, while building vocabulary, spelling, and reading fluency. The software can be used independently or, if instruction in reading comprehension skills is needed, along with the *Reading Strategies Study Guides* and audio cassettes. At all nine instructional levels, *Reading Strategies* contains lessons built around high-interest stories--stories designed to be of particular interest to older students and adult learners. The nine levels of *Reading Strategies* software, referred to as levels AA through IA, span reading levels 1.0 through 10.5.

SYSTEM AND SOFTWARE REQUIREMENTS

DOS Compatible Computer	One Disk Drive 5.25" or 3.5"
VGA Color Card and Monitor	DOS Version 3.3 or Higher
640 KB RAM Memory or Higher	Printer (Optional)
(500 KB must be free when program is running)	

The program must run off of a hard drive with the following availability:

- 1.5 MB available for program files
- 1.5-2.0 MB available for each level
- 1 MB available for every 200 students

This installation of *Reading Strategies* software will modify the AUTOEXEC.BAT file on all computers to which it is loaded in order to load SHARE.EXE, a DOS utility needed by the software program. The old version of AUTOEXEC.BAT will be retained on the computer as AUTOEXEC.BA~.

You may have some software loaded on your hard drive that does not allow you (or details a message that an attempt was made) to modify the AUTOEXEC.BAT file. If your computer does not allow a program to modify the AUTOEXEC.BAT file, you will have to modify it manually. Please consult your DOS manual for details.

In addition, you must have a PATH to the subdirectory that contains the version of DOS you are using. Again, please consult your DOS manual for details.

INSTALLATION

WARNING: YOU WILL BE ALLOWED TO INSTALL THIS PROGRAM ON NO MORE THAN FIVE COMPUTERS. THE COUNT BEGINS AT THE *BEGINNING* OF THE INSTALLATION OF EACH LEVEL. UNDER NO CIRCUMSTANCES SHOULD YOU INTERRUPT THE INSTALLATION OF A LEVEL ONCE THE PROCESS HAS BEGUN. IF YOU DO, YOU ARE LIKELY TO USE UP ONE OF YOUR FIVE INSTALLATIONS AND, IN ADDITION, PREVENT THE LEVEL YOU ARE INSTALLING FROM BEING INSTALLED ONTO THIS COMPUTER AT A FUTURE DATE. ALL DISKS SHOULD NOT BE WRITE PROTECTED DURING THIS INSTALLATION.

Make sure you have a DOS computer with VGA color card and monitor and the following four disks in front of you. These disks must be loaded to your hard drive.

Reading Strategies Installation 1
Reading Strategies Installation 2
Reading Strategies Installation 3
Reading Strategies Level Disks (labeled AA, BA, CA,...,IA) for the level you are installing

Boot the computer and change to the root directory of the drive on which you wish to install *Reading Strategies*. Insert Installation Disk 1 into either your *A* or *B* drive.

Type **A:install** or **B:install**, whichever is appropriate.

At this point, the computer will inform you that all files will be loaded to the C drive. If you wish to change this default, you must type the letter of the drive on which you wish to install *Reading Strategies*. Press **<ENTER>** to accept the default drive or to change the drive.

Insert Installation 2, Installation 3, and the Reading Strategies Level Disks when prompted to do so.

The system will automatically copy all necessary files from each of these disks and set-up the proper directories for the operation of the program. After the installation has been completed, you will be exited to an *RS* prompt.

The above process must be repeated for each level you wish to install. Once a level has been installed and data files have been established, during the process of installing additional levels, the computer will ask if you wish to overwrite your data files. You should answer NO to this question. The installation then continues as described above.

OPERATION

Reading Strategies can be started either from a menu of EDL software programs that you have installed or from your hard-drive prompt.

To start *Reading Strategies* from the EDL menu, you must be at the root-directory prompt of the drive on which you installed the software. When you are at this prompt, type EDL. Choose the program from the menu and push **<ENTER>**.

To start *Reading Strategies* directly from your prompt, thus by-passing the EDL menu, type **cd\RS** and press **<ENTER>** to change to the RS subdirectory and then type **RS** and press **<ENTER>** at the subdirectory prompt. You will see the *Reading Strategies* log-on screen. At this point, you must decide whether to enter the management system or the instructional program.

TO ENTER THE MANAGEMENT SYSTEM

You indicate to the computer that you wish to enter the management system by typing **MANAGER** as your user name. The computer will then ask for your password. Type **PASS**, the default password set by EDL.

You will then see the Management Menu. The following brief explanation of the menu options is meant to provide an introduction to the management system. Use the arrow keys to select the option and the <ENTER> key to choose it.

Student File Maintenance will allow you to add new or delete current students, edit student names and user names, check for a student's user name in the event the student has forgotten it, and assign students to specific classes. Once you are in Student File Maintenance, <F1> will display a help screen which explains the various options.

Display/Print Scores will allow you to find the record sheet for each student and either display it to the screen or to print it.

Display/Print Class Roll will allow you to list the students enrolled in the system or enrolled in specific classes. Once the information is accessed, it can be displayed on the screen or printed.

Delete an Entire Class allows all students, unassigned students, or students in a particular class to be deleted. This is particularly helpful if a large group of students will not be returning at the end of a specific period of time.

Compress/Rebuild Database compacts the data base after deleting a large number of students or restores the data base to an uncorrupted state after receiving a critical error. *This function should be used only after you have received a critical error or you have deleted a large number of students.*

Sound On/Off allows you to turn off or turn on the beeping sounds used in the student portion of the program.

Change Password allows you to change the access password to the management system. If you forget your password, you can reset it to PASS by typing EDLRSPW as the password.

Quit Management is used when you are finished working in the management system and wish to exit back to the log-on screen.

TO ENTER THE INSTRUCTIONAL PROGRAM

Entering any user name other than MANAGER will take the user into the instructional program. New users will be asked to enter their first and last names. Returning users will be asked to confirm their first and last names or, if the names are incorrect, to enter a new user name. ***THE SAME USER NAME SHOULD ALWAYS BE USED BY ANY INDIVIDUAL USER.***

When entering the program for the first time or when entering after completing a lesson and before starting a new one, the user will be asked to choose a level and lesson. When entering the program while in the middle of a lesson, the management system will automatically begin the session at the spot closest to where the previous session was stopped. In this way, students do not unnecessarily skip or repeat exercises.

The following exercises are included for each *Reading Strategies* lesson:

Flash & Type is an exercise in which the lesson words are flashed and students are required to type them.

Fill in the Blank is a cloze exercise using the lesson words. Words are provided either with an example showing how the words are used in a sentence or with a definition. The student then uses the words to complete the cloze exercise.

Read the Story provides two methods for reading the story. *Timed Reading* uses the techniques of controlled reading instruction to develop left-to-right fluency. One of the four available options should be used only the first time the story is read. *Read At Your Own Pace* allows each student to read the story as quickly or as slowly as is necessary for complete comprehension. This method is used whenever the story is reread.

Comprehension Check is an evaluation to determine how well the student comprehended the story. A variety of comprehension skills are evaluated in these questions. A poor score indicates the story was read too quickly and suggests that the reading rate should be slowed.

Vocabulary Review provides multiple choice questions to solidify the student's understanding of the lesson words.

Each lesson ends with one of the following three word games to further reinforce the *Learning 100* cycle vocabulary: Word Roll, Cross Word Puzzle, and Word Search.

In all instances, both in the management system and in the instructional portion of the program, the bottom line of the screen is devoted to listing the options available at that screen. In addition, at levels DA and above, instructions are provided at the user's option when entering each set of exercises.

Very often students wish to work on a lesson a second time in order to insure their educational development. While this program allows each lesson to be completed more than once, the score that is reported is always the score that was attained the first time the lesson was completed.

<ESC> can be used to quit the program at any point.

FCCAA EDUCATION DEPARTMENT
353 SPECIAL DEMONSTRATION PROJECT
COMPUTERIZED/TUTOR ASSISTED READING INSTRUCTION

TUTOR DATA FORM

I am interested in receiving training and participating as a Volunteer Computer Reading Tutor for the FCCAA's Education Department. Start Date and sites for training/tutoring will be announced after tutors are recruited.

NAME_____

ADDRESS_____

_____

PHONE #_____

I would be interested in tutoring at:
(Please check the one training/tutoring site that is most convenient for you.)
CONNELLSVILLE EDUCATION CENTER_____

UNIONTOWN COMM. SERVICE CENTER_____
(N. Beeson Ave.)
PENN STATE FAYETTE CAMPUS _____

I : DO_____

DO NOT_____ **know how to: OPERATE A PC**_____

AM FAMILIAR WITH WP5.1 _____

CERTIFIED LAUBACH READING TUTOR:

YES_____

NO_____

COMPUTER CENTER
Room 211
Spring '96 HOURS

Beg. 2/19/96

Mon.	9:00am - 7:00pm
Tues.	9:00am - 7:00pm
Wed.	9:00am - 10:00pm
Thurs.	9:00am - 7:00pm
Fri.	9:00am - 6:00pm
Sat.	10:00am - 5:00pm
Sun.	1:00pm - 5:00pm

Hours are subject to change without notice.

FAYETTE COUNTY
COMMUNITY ACTION AGENCY INC.

Community Service Center
137 North Beeson Ave.
Uniontown, PA 15401

Phone 412-437-60
Fax 412-437-441

February 16, 1996

Dear Volunteer:

The Community Action Education Center is offering a computer workshop to train Adult Literacy Volunteers in teaching the adult learner. The first workshop will be held at Penn State University (Fayette campus) on Friday, February 23, 1996 from 11:00 AM to 3:00 PM. The workshop will take place at the computer lab in the Eberly building. The building is located to right as you enter the campus. Signs will be posted.

The Agenda will consist of the following 2 sessions:

I. Adult Literacy/Sensitivity 11:00 - 12:00 PM

II. "Computer Tutor" Hands-On Workshop 12:00 - 3:00 PM

A. The Evolution of and uses of personal computers.

1. Importance of becoming computer literate.

2. Data becomes information.

3. Computer uses.

4. Keyboard.

B. Anatomy of a personal computer.

C. Anatomy and care of a diskette.

D. Conclusion: Hands-on Wordperfect tutorial

The second workshop will be held on Friday, March 1, 1996. This workshop will be 6 hours training on "How to use the EDL Learning 100 - Reading Strategies Software." You will be receiving an agenda on this training at a later time.

We're looking forward to seeing you at the computer training. If you have any questions, please feel free to call the Community Action Education Center at 626-1070.

Sincerely,
Lori L. Critchfield
Lori L. Critchfield

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AGENDA

COMPUTER TRAINING

PENNSYLVANIA STATE UNIVERSITY FAYETTE CAMPUS

FRIDAY, MARCH 1, 1996

10:00 AM - 4:00PM

10:00 - 10:15	WELCOME & OVERVIEW OF 353 PROJECT
10:15 - 11:00	ABOUT EDL READING STRATEGIES SOFTWARE a. Learning 100 b. Levels available c. network vs stand-alone d. determining reading levels
11:00 - 11:20	BREAK
11:20 - 12:30	HAND'S ON INSTRUCTION a. step-by-step instructions
12:30 - 1:00	LUNCH
1:30 - 4:00	MORE HAND'S - ON
	USING THE STUDENT MANAGEMENT PROGRAM a. step-by-step instructions
	RECORDING AND REPORTING
	TECHNICAL ASSISTANCE a. CALL ME! If you are having a problem using the software.

Susan Cowan - 437-6050
Teacher

FAYETTE COUNTY COMMUNITY ACTION AGENCY, INC.
137 North Beeson Avenue
Uniontown, PA 15401
Phone (412) 437-6050

Literacy Program
Tutoring Log

Name of tutor _____ Name of student _____

Where will you meet? _____ When will you meet? _____

Length of tutoring sessions _____ Date _____

We are interested in supporting you as you work with your student.
Please return this form after your second session.

First session

Brief summary of session (materials and activities):

Ideas for next session:

Any problems?

Any progress?

Second session

Brief summary of session (materials and activities):

Ideas for next session:

Any problems?

Any progress?

_____ I would like you to contact me for additional help.

unconditional permission to copy

Literacy Program

Adult Attendance Record

Date _____

Name	AM/In	AM/Out	PM/In	PM/Out	ABE	PAR	PAC

ABE: Adult Basic Education PAR: Parent education PAC: Parent/child interaction time

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27 of 112

AN: ED373172
CHN: CE066975
AU: Royce,-Sherry
TI: Pennsylvania's Exemplary Special Projects 1976-1990 as Reviewed and Rated by the FOCUS Panel.
CS: Pennsylvania State Dept. of Education, Harrisburg. Bureau of Adult Basic and Literacy Education.
PY: 1992
NT: 60 p.; Prepared for the Regional Staff Development Center Directors.
PR: EDRS Price - MF01/PC03 Plus Postage.
DT: Reference Materials - Bibliographies (131)
CP: U.S.; Pennsylvania
LA: English
GL: State
PG: 60
DE: Career-Counseling; Curriculum-; Curriculum-Development; Curriculum-Guides; Displaced-Homemakers; Educational-Media; English-Second-Language; Individualized-Instruction; Numeracy-; Program-Descriptions; Publicity-; Public-Relations; Special-Needs-Students; Teaching-Guides
DE: *Adult-Basic-Education; *Adult-Counseling; *Computer-Assisted-Instruction; *Demonstration-Programs; *Literacy-Education; *Staff-Development
ID: 353-Project
ID: *Workplace-Literacy
IS: RIEJAN95
AB: This document reviews 117 special projects selected by a panel of literacy experts using three criteria: effectiveness, innovation, and adaptability. Special projects are grouped by the area, or major thrust, of the project and product. The nine areas are as follows: counseling, curriculum, English as a Second Language, management, promotion, special populations, staff development, technology, and workplace. Each section or area begins with a listing of the project titles, in alphabetical order, with the year in which the project was completed and page number. The format for each special project is: title, area, year in which the project was completed, issue (FOCUS issue in which the project was reviewed), AE number (request number for use when borrowing the project from Pennsylvania's AdvancE Clearinghouse), project director, address, telephone, audience (administrators, teachers/tutors, counselors, learners), subarea (additional product interest beyond that identified in area), components (instructor's guide, final report, media component, learner workbook, curriculum), panel review (year and rating of good, superior, or excellent for effectiveness, innovation, and adaptability), cost (federal funding), and comments (brief description of project's goals, products, and/or results). An index lists projects alphabetically by title; area and page are indicated. (YLB)

LV: 1
CH: CE
FI: ED
DTN: 131

41 of 112

AN: ED367864
CHN: CE065942
TI: Model for Implementing **Technology** in the ABE Curriculum. 353 Special Demonstration Project. Final Report.
CS: Grand Rapids Public Schools, Mich.
SP: Michigan State Dept. of Education, Lansing. Adult Extended Learning Services.
PY: 1993
NT: 22 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DT: Reports - Descriptive (141)
CP: U.S.; Michigan
LA: English
PG: 22
DE: Adult-Educators; Demonstration-Programs; Models-; Program-Implementation
DE: *Adult-Basic-Education; *Basic-Skills; *Computer-Assisted-Instruction; *Curriculum-Development; *Educational-Technology; *Inservice-Teacher-Education
ID: 353-Project
IS: RIEAUG94
AB: The Computer Assisted Basic Skills project was conducted during the 1991-92 academic year in the Grand Rapids Public Schools in Michigan to develop a model that would provide adult educators with a framework for developing and/or redesigning a computer-assisted instructional (CAI) program for basic skills instruction. Existing models and model components for designing and implementing basic skills CAI programs were identified and reviewed to determine their appropriateness to adult **basic education**. Five components (curriculum, software, hardware, procedures, and trained staff) were selected as the foundation of a model for implementing CAI curricula. The model components were field tested, refined, and organized into a package for use by adult educators. A training package was designed to assist users in implementing the model. Formative and summative evaluations established that the project staff were successful in producing a curriculum-driven model that is suitable for duplication and/or expansion to design inservice training in basic skills CAI for other adult education staff. (Appended are the model for implementing basic skills CAI and statements of the purpose and responsibilities of the community education computer planning committee.) (MN)
LV: 1
CH: CE
FI: ED
DTN: 141

AR.3025-970
C.1

353 Final Report

ABE COMPUTER-ASSISTED INSTRUCTION PROJECT

Thomas P. Wojcicki

Adult Education Coordinator

Somerset County Area Vocational-Technical School

Fiscal Year July 1, 1993 to June 30, 1994

Grantee:
Somerset County Area Vocational-Technical School
Rd #5, Vo-Tech Road
Somerset, PA 15501
Funding: $4,901, Project No.: 99-4027

The activity which is the subject of this report was supported in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education or the Pennsylvania Department of Education, and no official endorsement by these agencies should be inferred.

WESTERN PENNSYLVANIA
ADULT LITERACY RESOURCE CENTER
5347 William Flynn Highway (Route 8)
Gibsonia, PA 15044

BRIEF HISTORY OF

THE EVOLUTION OF

AND

USES

FOR PERSONAL COMPUTERS

The Evolution of Computers

The First Generation (1944-1958):
punched cards, magnetic tape, vacuum tubes

The Second Generation (1959-1963):
transistors, magnetic cores, removal magnetic disk packages

The Third Generation (1964-1970):
integrated circuits, magnetic disks, multiprogramming, timesharing, operating systems and application software

The Fourth Generation (1971-Now):
large-scale integration circuits, large internal memory capacity, microprocessors

The Fifth Generation (Now and in the Future)

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Importance of becoming computer literate

Why Should You Become Computer Literate?

- To satisfy job requirements
- To increase job skill and marketability
- To learn to use a computer as a personal resource

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As a computer literate person , you should:

- Master the terminology used to talk about what a computer is and how to use one

- Learn to identify and describe the functions of the various components of a computer and information system

- Learn to use a computer and to produce the information you need

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Data becomes Information

Computers Make:

- Data collection easier
- Production of information faster, easier, better
- Information available in more useable forms

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Computer uses

Computers are Being Used:

- In business
- In government
- In the legal profession
- In medicine
- In education
- In industry
- In entertainment and sports
- In agriculture
- In the home

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Most employers do not expect potential employees to be computer experts. However, many expect them to be prepared to use computers as everyday tools to solve job-related problems. Two questions a job seeker being interviewed may be asked today are, "What do you know about computers?" and "What kind of software are you familiar with?" The more you know about computers, the better you'll be able to handle such questions - and the more effective you'll be in your career.

Computer literacy **- is having an understanding of what a computer is and how to use it as a resource.** Literacy, which is understanding, needs to be distinguished from competency, which is having a skill.

Computer competency **- is having some skill with a computer so that you can use it to meet your information needs and improve your productivity.**

A *computer* is a device made of electronic and electromechanical parts. The word *electromechanical* means both electronic and mechanical.

At present, computers come in four basic sizes and shapes. They are:

1. Supercomputers
2. Mainframes
3. Minicomputers
4. Microcomputers

Supercomputers **are the largest and most powerful kinds of computers costing millions of dollars.**

Mainframe computers **are large computers costing up to $10 million that can process billions of characters of data.**

Minicomputers **are computers costing thousands of dollars that are smaller than mainframes in processing speeds and data-storing capacities.**

Microcomputers **are small computers costing only a few hundred or few thousand dollars.**

The way to think about a computer is as a *system*. The system is made up of five (or perhaps six) parts. The purpose of the system is to process data into information.

A *computer system* is a combination of five, or often six, elements.
They are:

1. Hardware
2. Software
3. Data/Information
4. Procedures
5. People
6. Connectivity

and often

***Hardware* is equipment that includes the computer itself, keyboard, monitor, printer, and other devices.**

***Software* - also called programs - consists of step-by-step instructions that tell the hardware how to perform a task.**

***Data* is raw, unevaluated facts and figures, concepts, or instructions.**
***Information* is data tht has been made useful, by being processed by a computer system.**

***Procedures* are the guidelines to follow when using hardware, software, or data.**

***Connectivity* consists of the electronic connections, or communications, beween computer systems.**

To process data into information, a computer system proceeds through four phases of activity.
These phases are:

1. Input
2. Processing
3. Output
4. Storage

Input Hardware **consists of devices for entering data into a computer system in a form that can be processed by the computer.** There are two kinds:

1. Keyboard devices

2. Non-Keyboard, or direct entry, devices.

Examples of non-keyboard devices: mouse, trackball, fax, scanner, light pen, touch screen, digitizer, pen-based system and voice recognition system.

Keyboard Input Devices

The most common means by which you will input data is through a keyboard.

KEYBOARDS

A ***keyboard*** is an imput device that looks like a typewriter keyboard but has additional keys for specific purposes. Most keyboards have the following features:

1. Standard character keys
2. Function keys
3. Special-purpose keys
4. Numeric keys
5. Cursor-movement keys

The ***character keys*** are used to type in text (letters, numbers, punctuation marks and special characters). These keys are positioned in much the same location as the keys on a typewriter. This layout is called the **QWERTY layout because the first six characters on the tip row of alphabetic keys spell QWERTY.**

The Function keys **are those labeled F1, F2, and so on, and are used to issue frequently used commands.** Most keyboards have 10 to 12 function keys.

What the function keys do exactly is determined by the software you are using at the moment. In one word processing program, the F2 key may help you print out a document. In another, it may help you save your work onto the hard disk.

The users' manual that comes with the software tells you how to use the function keys.

Special-purpose keys **are used to help enter and edit data and execute commands.**

Enter - execute commands: The ***Enter*** key, often indicated by a left-facing bent arrow, is used to enter commands into the computer. You will use this one frequently.

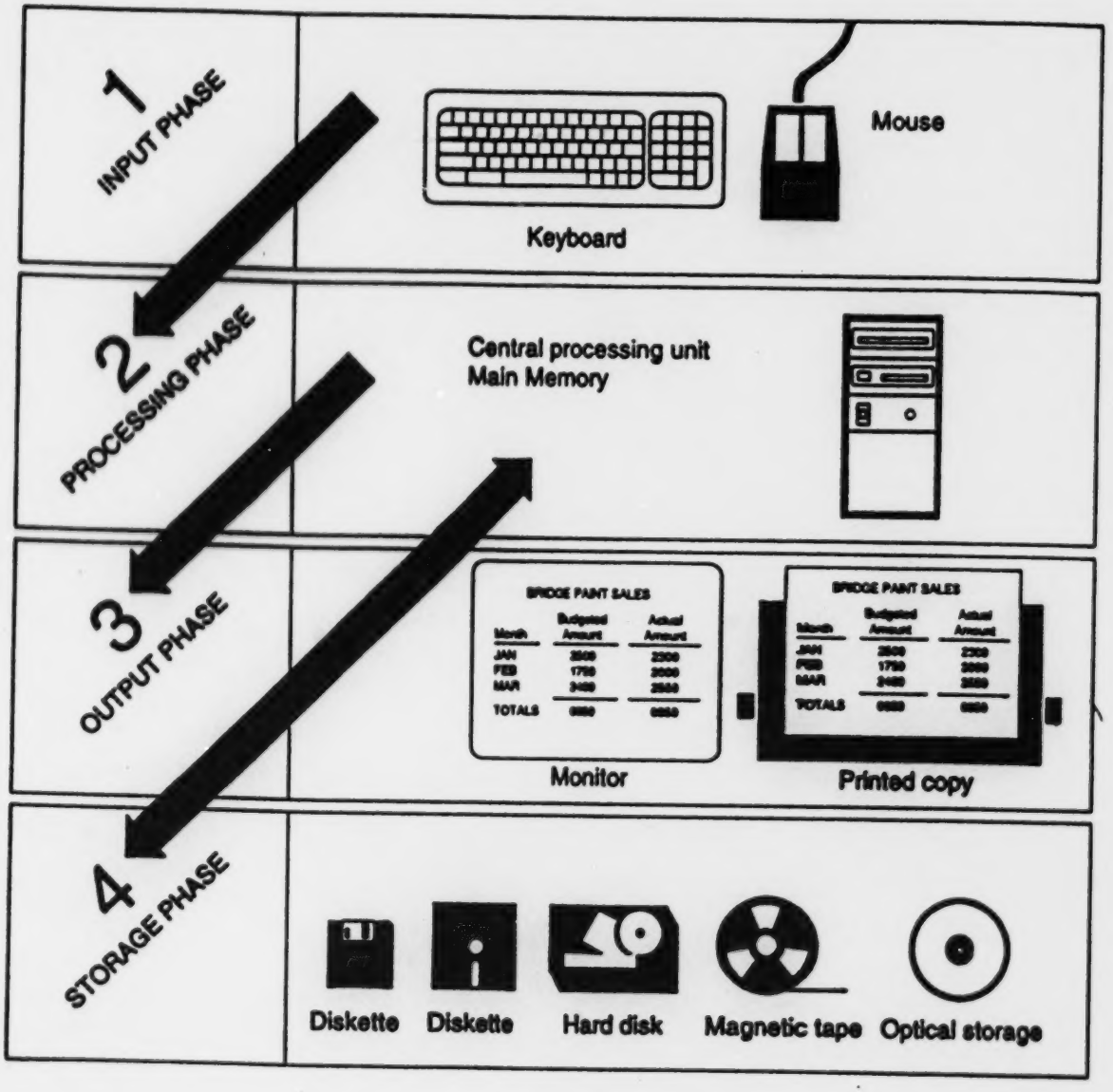
Ctrl, Alt, Shift - modifiers: Three special-purpose keys are modifier keys. That is by themselves they can do nothing, but when pressed with another key, they modify the function of the other key.

Del and Ins - editing: The special-purpose keys ***Del*** **(delete)** and ***Ins*** **(Insert)** are used for editing. In word processing, you may use them frequently to delete and insert text.

Caps lock - uppercase: The ***Caps lock*** key is used to make all letter keys uppercase - that is, type all CAPITAL LETTERS, as here.

Cursor movement keys - The *cursor* is the blinking symbol on the screen that shows where data may be entered next. The *cursor-movement keys*, which are represented by directional arrows, move the cursor around the screen.

TM 5



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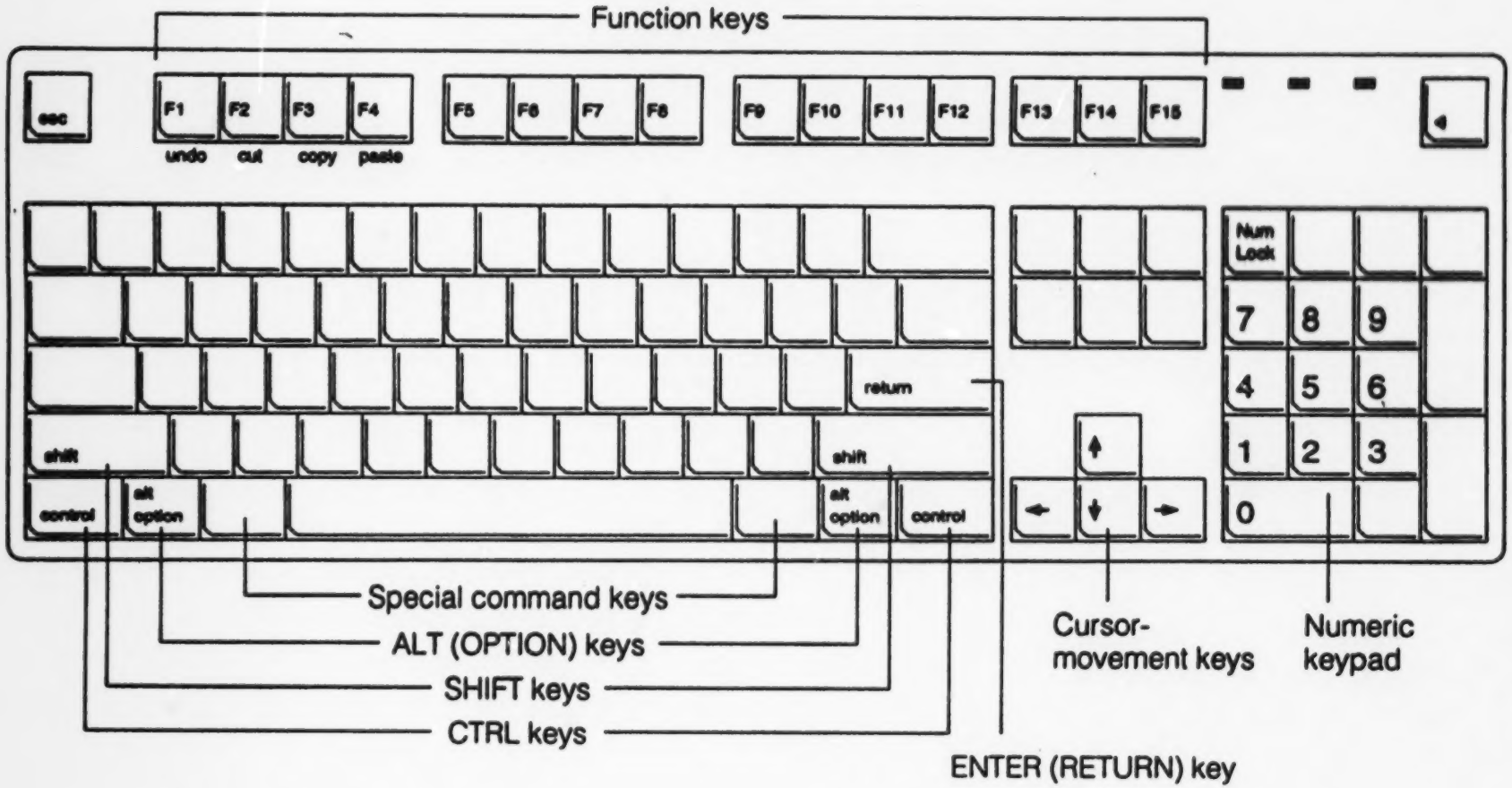
TM 13



51

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52

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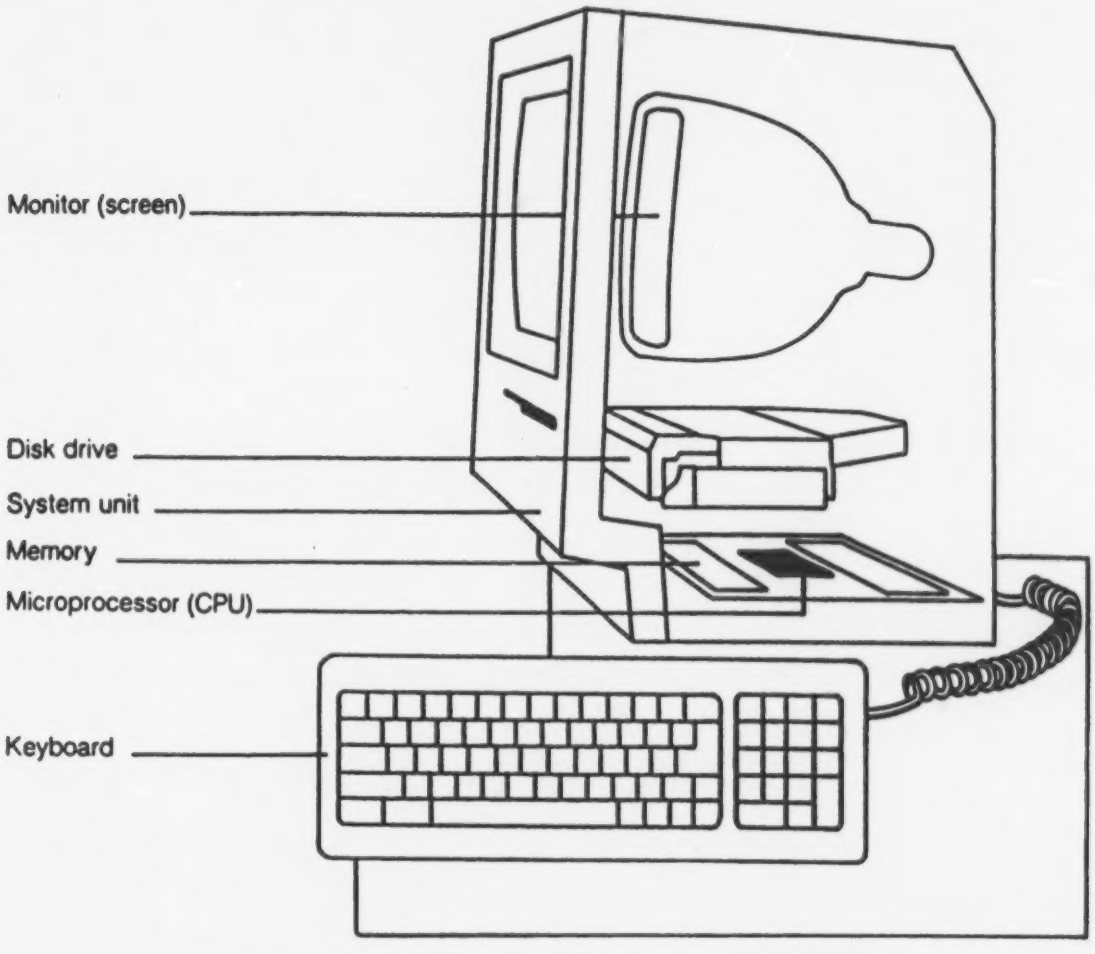
ANATOMY

OF

A

PERSONAL COMPUTER

Figure 1.10
Basic anatomy of a microcomputer. This illustration shows a cutaway drawing of a Macintosh microcomputer with monitor, keyboard, and system unit with disk drive.



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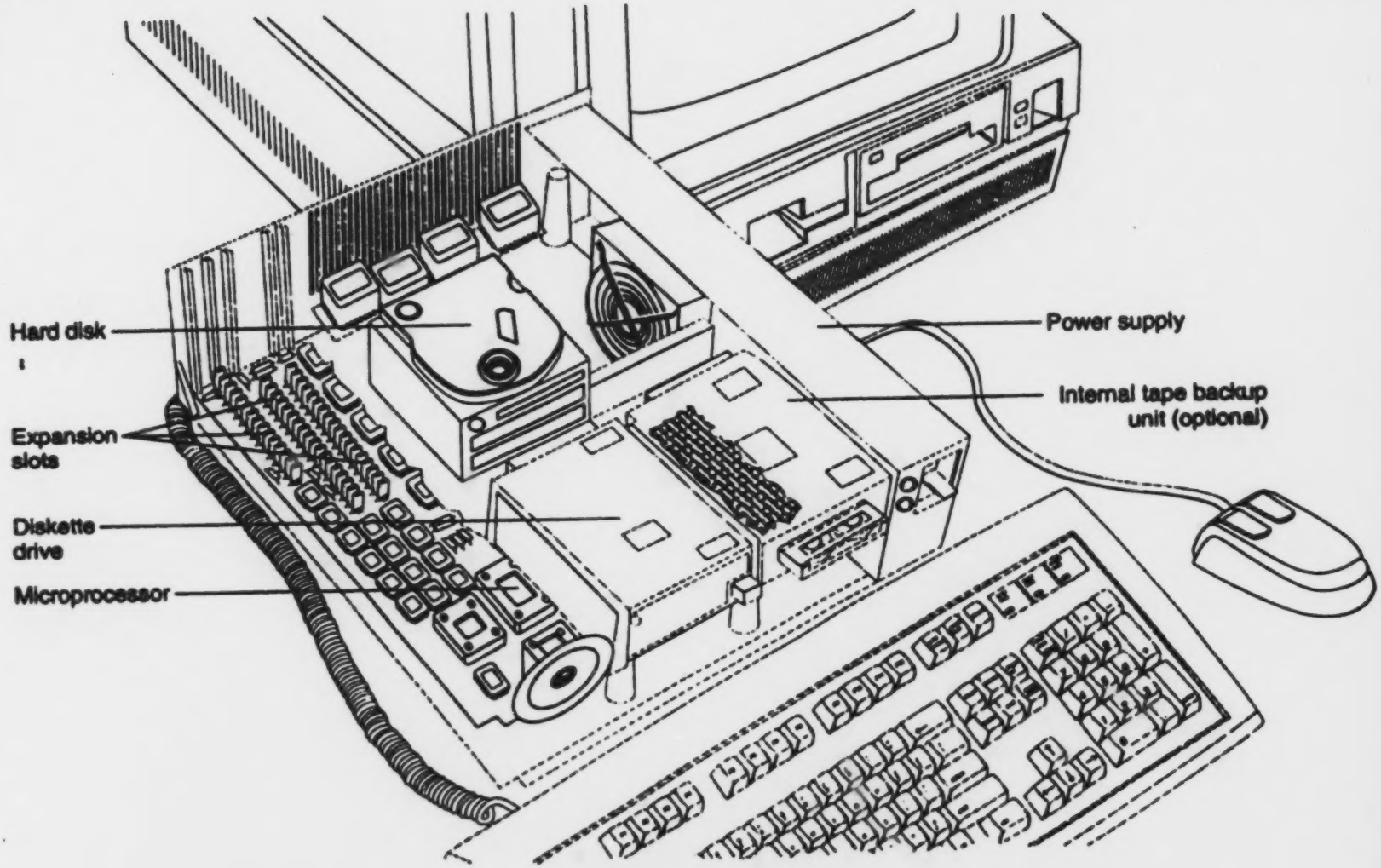
TM 4



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Dumb Terminal
- cannot process or store its own data
- used only for data input and retrieval

Smart Terminal
- inputs and retrieves data and has limited processing capability
- cannot be used for programming

Intelligent Terminal or Workstation
- inputs, retrieves, and processes data
- includes a processing unit, storage capabilities, and software - is actually a microcomputer

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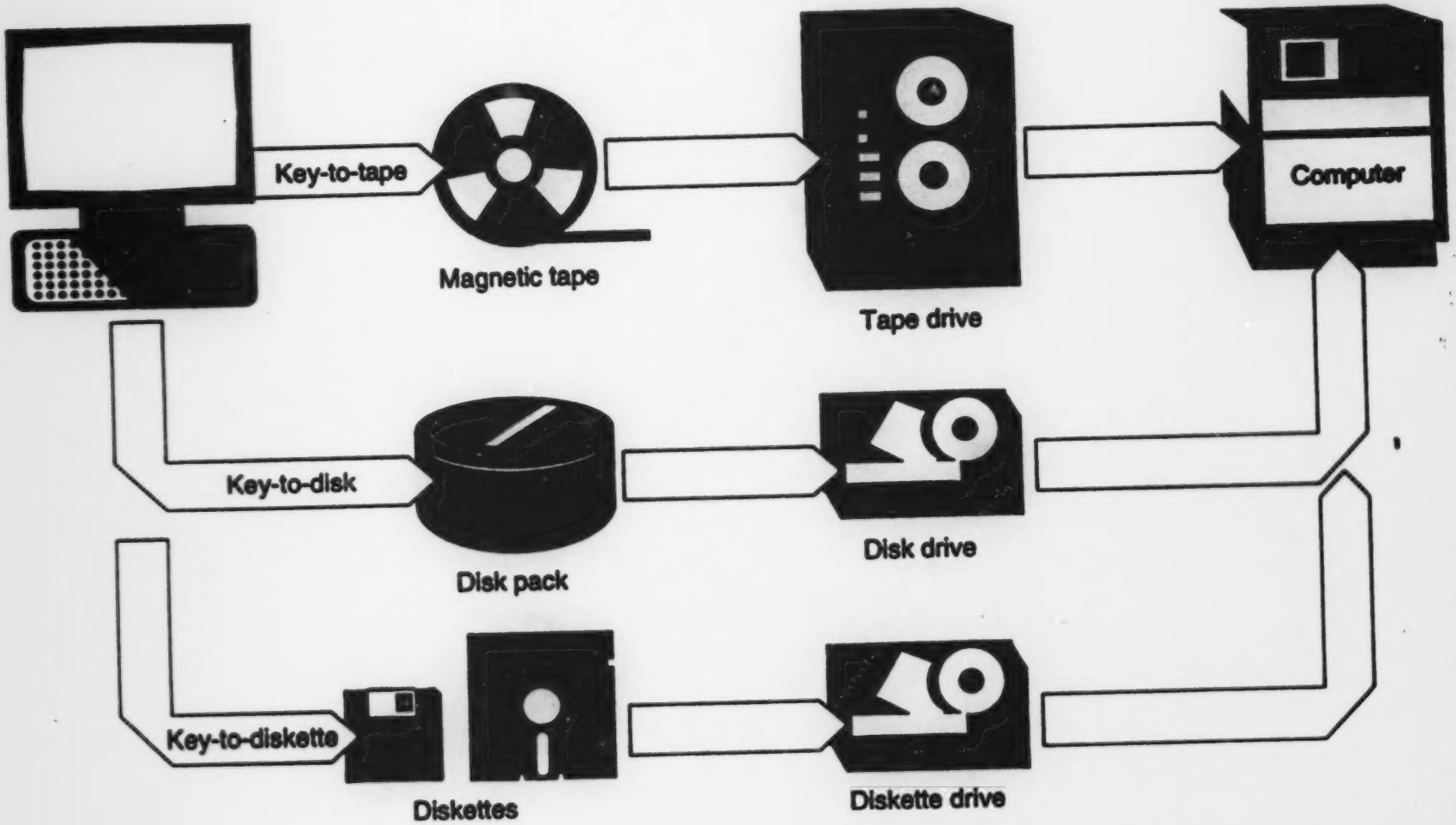
TM 15



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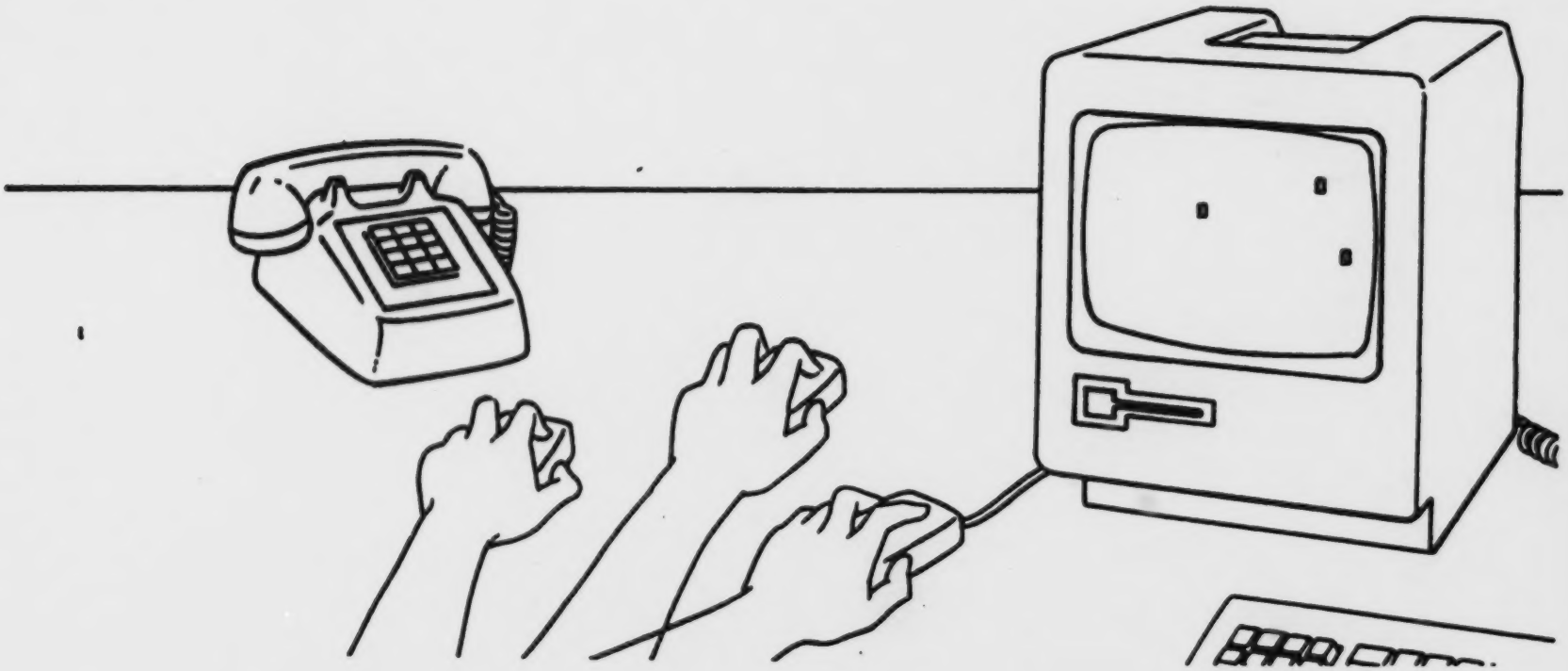
TM 16 Using a mouse



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ANATOMY

AND CARE

OF

A

DISKETTE

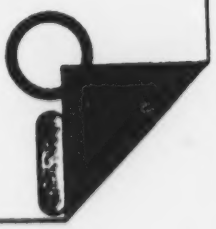
TM 26

1. Do not touch the disk surface. It is easily contaminated, which causes errors.

2. Do not use alcohol, thinners, or freon to clean the disk.

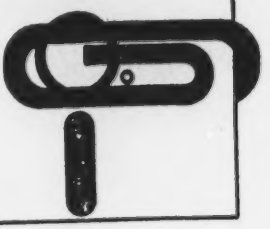
3. Do not use near magnetic field, including that of a telephone. Data can be lost if exposed.

4. Do not bend or fold the disk.

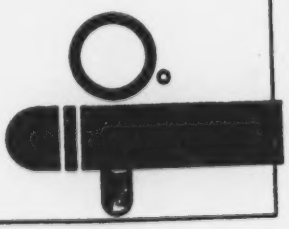


5. Do not place heavy objects on the disk.

6. Do not use rubber bands or paper clips on the disk.



7. Do not use erasers on the disk.



8. Do not expose the disk to excessive heat or light.

Manufacturer's label

9. Apply the index label to the right of the manufacturer's label. Do not use labels in layers.

10. Write the index label with felt tip pen only, not pencil or ball-point pen.

Disk drive

11. Insert carefully, by grasping upper edge of disk and placing it into the disk drive.

12. Keep disk in its protective envelope when not in use.

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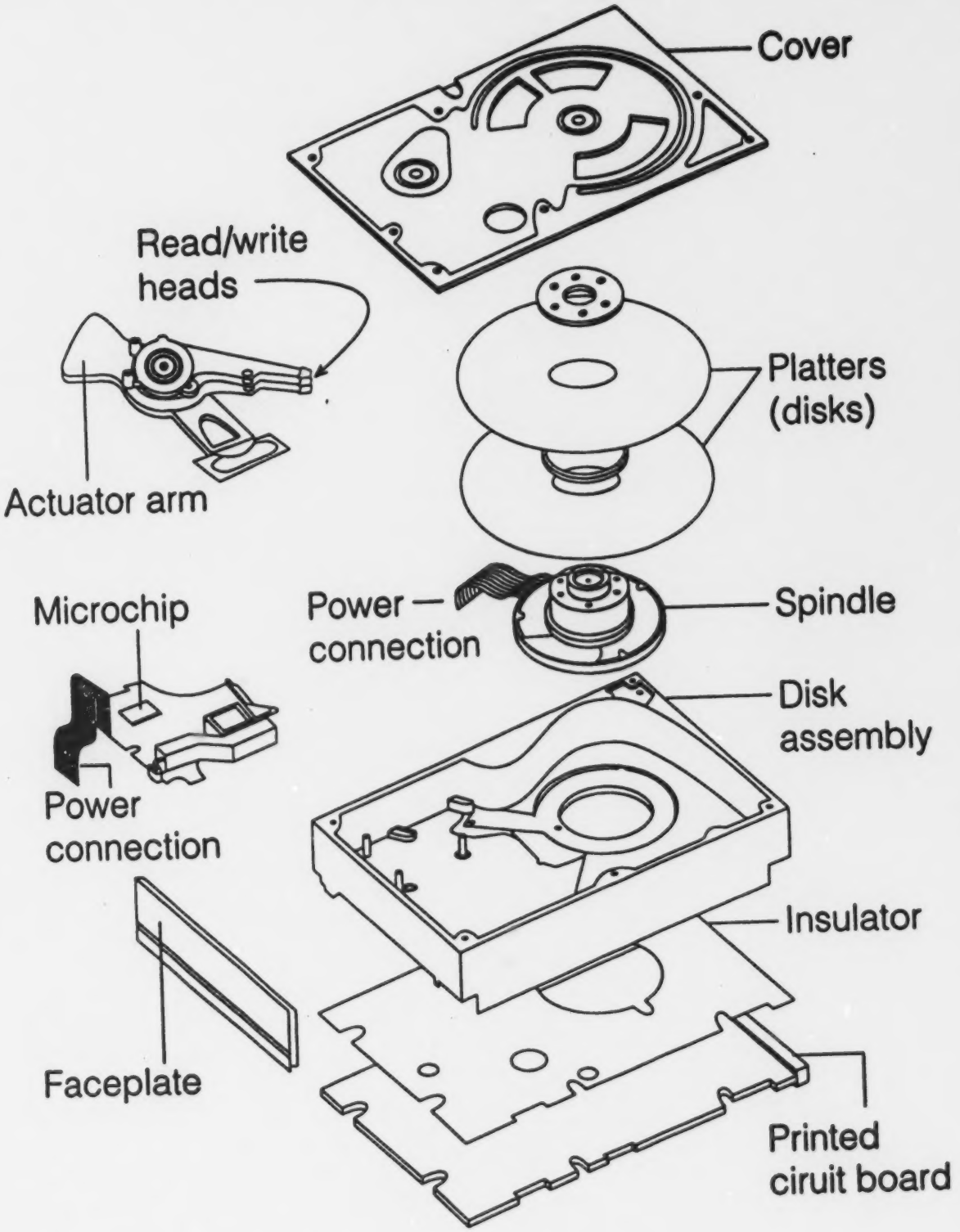
TM 27



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D

List of WordPerfect Commands

Feature	Keystrokes
Advance	Shift-F8, 4, 1
Appearance Attributes	Ctrl-F8, 2
Automatic Reference	Alt-F5, 1
Automatically Format & Rewrite	Shift-F1, 3, 1
Auxiliary Files Location	Shift-F1, 7
Back space	Back space
Backup	Shift-F1, 1
Base Font	Ctrl-F8, 4
Binding	Shift-F7, B
Block	Alt-F4
Block Append (Block On)	Ctrl-F4, 1, 4
Block Center (Block On)	Shift-F6
Delete (Block On)	Del
Move (Block On)	Ctrl-F4
Print (Block On)	Shift-F7
Protect (Block On)	Shift-F8
Save (Block On)	F10
Bold	F6 or Ctrl-F8, 2, 1
Cancel	F1
Print Job(s)	Shift-F7, 4, 1
Cartridges and Fonts	Shift-F7, 5, 3, 5
Case Conversion (Block On)	Shift-F3
Center	Shift-F6
Center Page Top to Bottom	Shift-F8, 2, 1
Change Default Directory	F5, Enter, 7
Colors/Fonts/Attributes	Shift-F1, 3, 2

Feature	Keystrokes
Columns (Text and Parallel)	Alt-F7
Compose	Ctrl-2
Concordance	Alt-F5, 5, 3
Conditional End of Page	Shift-F8, 4, 2
Control Printer	Shift-F7, 4
Copy File	F5, Enter, 8
Create Directory	F5, =
Cursor Movement	
Beginning of Document	Home, Home, ↑
Beginning of Line (before codes)	Home, Home, Home, ←
Beginning of Line (after codes)	Home, Home, ←
Character Left	←
Character Right	→
End of Document	Home, Home, ↓
End of Line	Home, Home, → or End
Left Edge of Screen	Home, ←
Right Edge of Screen	Home, →
Line Down	↓
Line Up	↑
Page Down	PgDn
Page Up	PgUp
Screen Down	Home, ↓ or gray plus (+)

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Feature	Keystrokes
Screen Up	Home, 8 or gray minus (-)
Word Left	Ctrl, ←
Word Right	Ctrl, →
End of Document	Home, Home, ↓
Date Code	Shift-F5, 2
Date Format	Shift-F5, 3
Date Text	Shift-F5, 1
Date/Outline	Shift-F5
Decimal/Align Character	Shift-F8, 4, 3
Define (Mark Text)	Alt-F5, 5
Delete Character Left	Back space
Delete Character Right	Del
Delete Directory	F5, Enter, 2
Delete File	F5, Enter, 2
Delete to End of Line (EOL)	Ctrl-End
Delete to End of Page (EOP)	Ctrl-PgDn
Delete Word	Ctrl-Back space
Delete Word Left	Home, Back space
Delete Word Right	Home, Delete
Directory	F5
Display All Print Jobs	Shift-F7, 4, 3
Display Pitch	Shift-F8, 3, 1
Display Setup	Shift-F1, 3
Document Comments	Ctrl-F5, 5
Document Compare	Alt-F5, 6, 2
Document Format	Shift-F8, 3
Document Summary	Shift-F8, 3, 4
DOS Text File	
Retrieve (CR/LF to [HRt])	Ctrl-F5, 1, 2
Retrieve (CR/LF to [SRt])	Ctrl-F5, 1, 3
Save	Ctrl-F5, 1, 1
Double Underline	Ctrl-F8, 2, 3
Edit Table of Authorities	
Full Form	Alt-F5, 5, 5
Endnote	Ctrl-F7, 2
Endnote Placement Code	Ctrl-F7, 3
Exit	F7
Extra Large Print	Ctrl-F8, 1, 7
Fast Save	Shift-F1, 4
Figure Box (Graphics)	Alt-F9, 1
Filename on Status Line	Shift-F1, 3, 4
Fine Print	Ctrl-F8, 1, 3
Flush Right	Alt-F6
Footers	Shift-F8, 2, 4
Footnote	Ctrl-F7, 1

Feature	Keystrokes
Force Odd/Even Page	Shift-F8, 2, 2
Format	Shift-F8
Forms	Shift-F7, 5, 3, 4
Generate Tables, Indexes, etc.	Alt-F5, 6, 5
Generic Word Processor Format	Ctrl-F9, 3
"Go" (Start Printer)	Shift-F7, 4, 4
GoTo	Ctrl-Home
Go to DOS	Ctrl-F1, 1
Graphics	Alt-F9
Graphics Quality	Shift-F7, G
Graphics Screen Type	Shift-F1, 3, 5
Hard Page	Ctrl-Enter
Hard Return	Enter
Hard Return Display Character	Shift-F1, 3, 6
Hard Space	Home, space bar
Headers	Shift-F8, 1, 1
Help	F3
Horizontal Lines (Graphics)	Alt-F9, 5, 1
Hyphenation	Shift-F8, 1, 1
Hyphenation Zone	Shift-F8, 1, 2
Left Indent	F4
Left/Right Indent	Shift-F4
Index	
Define	Alt-F5, 5, 3
Mark	Alt-F5, 3
Initial Codes (Format)	Shift-F8, 3, 2
Initial Settings (Setup)	Shift-F1, 5
Insert	Ins
Italics	Ctrl-F8, 2, 4
Justification	Shift-F8, 1, 3
Kerning	Shift-F8, 4, 6, 1
Keyboard Layout	Shift-F1, 6
Language	Shift-F8, 4, 4
Large Print	Ctrl-F8, 1, 5
Line Draw	Ctrl-F3, 2
Line Format	Shift-F8, 1
Line Height	Shift-F8, 1, 4
Line Numbering	Shift-F8, 1, 5
Line Spacing	Shift-F8, 1, 6
List	
Define	Alt-F5, 5, 2
Mark (Block On)	Alt-F5, 2
List Files	F5, Enter
Location of Auxiliary Files	Shift-F1, 7
Look	F5, Enter, 6

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Feature	Keystrokes
Macro	Alt-F10
Macro Define	Ctrl-F10
Left Margin Release	Shift-Tab
Margins	
Left/Right	Shift-F8, 1, 7
Top/Bottom	Shift-F8, 2, 5
Mark Text	Alt-F5
Master Document	
Condense	Alt-F5, 6, 4
Expand	Alt-F5, 6, 3
Subdocument	Alt-F5, 2
Math/Columns	Alt-F7
Merge	Ctrl-F9, 1
Codes	Shift-F9
Move	Ctrl-F4
Block (Block On)	Ctrl-F4, 1
Page	Ctrl-F4, 3
Paragraph	Ctrl-F4, 2
/Rename (List Files)	F5, Enter, 3
Sentence	Ctrl-F4, 1
Tabular Column (Block On)	Ctrl-F4, 2
Name Search (List Files)	F5, Enter, N
New Page Number	Shift-F8, 2, 6
Normal Font (Turn off Attrib.)	Ctrl-F8, 3
Number of Copies	Shift-F7, N
Outline	Shift-F5, 4
Outline (Attribute)	Ctrl-F8, 2, 5
Overstrike	Shift-F8, 4, 5
Page Format	Shift-F8, 2
Page Numbering	Shift-F8, 2, 7
Paragraph Number	Shift-F5, 5
Paragraph Numbering Definition	Shift-F5, 6
Paper Size/Type	Shift-F8, 2, 8
Password	Ctrl-F5, 2
Print	Shift-F7
Block (Block On)	Shift-F7, Y
Color	Ctrl-F8, 5
Full Document	Shift-F7, 1
List Files	F5, Enter, 4
Page	Shift-F7, 2
Printer Command	Shift-F8, 4, 6, 2
Printer Settings	Shift-F7, 5, 3
Redline	Ctrl-F8, 2, 8
Redline Method	Shift-F8, 5, 3

Feature	Keystrokes
Remove Redline/Strikeout	Alt-F5, 6, 1
Repeat Value	Esc
Replace	Alt-F2
Replace, Extended	Home, Alt-F2
Retrieve Block (Move)	Ctrl-F4, 4, 1
Retrieve Document	Shift-F10
Retrieve, List Files	F5, Enter, 1
Retrieve Rectangle (Move)	Ctrl-F4, 4, 3
Retrieve Tabular Column (Move)	Ctrl-F4, 4, 4
Reveal Codes	Alt-F3
Rewrite Screen	Ctrl-F3, 0
Rush Print Job	Shift-F7, 4, 2
Save	F10
Screen	Ctrl-F3
Forward Search	F2
Forward Search, Extended	Home, F2
Backward Search	Shift, F2
Backward Search Extended	Home, Shift-F2
Select Printer	Shift-F7, S
Setup	Shift-F1
Shadow Print	Ctrl-F8, 2, 6
Shell	Ctrl-F1
Side-by-side Column Display	Shift-F1, 3, 8
Size Attribute	Ctrl-F8, 1
Small Caps	Ctrl-F8, 2, 7
Small Print	Ctrl-F8, 1, 4
Sort	Ctrl-F9, 2
Spell	Ctrl-F2
Split Screen	Ctrl-F3, 1
Stop Printing	Shift-F7, 4, 5
Strikeout	Ctrl-F8, 2, 9
Style	Alt-F8
Subscript	Ctrl-F8, 1, 2
Superscript	Ctrl-F8, 1, 1
Suppress (Page Format)	Shift-F8, 2, 9
Switch	Shift-F3
Tab Align	Ctrl-F6
Tab Set	Shift-F8, 1, 8
Table (Graphics)	Alt-F9, 2
Table of Authorities	
Define	Alt-F5, 5, 4
Edit Full Form	Alt-F5, 5, 5

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Feature	Keystrokes
Full Form (Block On)	Alt-F5, 4
Short Form	Alt-F5, 4
Table of Contents	
Define	Alt-F5, 5, 4
Mark (Block On)	Alt-F5, 1
Text Box (Graphics)	Alt-F9, 3
Text In (List Files)	F5, Enter, 5
Text In/Out	Ctrl-F5
Text Quality	Shift-F7, T
Thesaurus	Alt-F1
Thousand's Separator	Shift-F8, 4, 3
Type Through	Shift-F7, 5
Typeover	Ins
Undelete	F1
Underline	F8 or Ctrl-F8, 2, 2
Underline Spaces/Tabs	Shift-F8, 4, 7
Units of Measure	Shift-F1, 8
User-Defined Box (Graphics)	Alt-F9, 4
Vertical Line (Graphics)	Alt-F9, 5, 2
Very Large Print	Ctrl-F8, 1, 6
View Document	Shift-F7, 6
Widow/Orphan Protection	Shift-F8, 1, 9
Window	Ctrl-F3, 1
Word/Letter Spacing	Shift-F8, 4, 6, 3
Word Search	F5, Enter, 9
Word Spacing Justification Limits	Shift-F8, 4, 6, 4
WordPerfect 4.2 Format	Ctrl-F5, 4

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TESTING AND IMPLEMENTATION

In order to correctly place each student in the **EDL Reading Strategies Software:**

1. You must determine the student's reading rate. You may use reading scores obtained by administering the:

   A. Entry level locator test included in your tutor's manual. (Use the prescripton guide on the back of the locator test, to place the student in the correct entry level guide and level of reading software.)

   B. Wide Range Achievement Test (WRAT)

   C. Test of Adult Basic Education (TABE)

Once reading rate has been determined:

2. The **Entry Level Guide** is then administered in order to select the appropriate **Thinking Strategies/Reading Strategies** test.

(Entry Level Guides for each level are included in your tutor's manual)

Levels AA-FA correspond to reading levels 1 through 6.

The Thinking Strategies program starts at level GA (7.0), so students should refer to the Reading Strategies program for instruction at lower levels.

LEARNING 100 not only provides students with the instructional program they need, but also allows for "open entry" and "open exit." This means that once students are tested and placed in the program, they can come and go as their schedules demand, but each time they re-enter, they will begin exactly where they left off. There will be no gaps in their instruction and they will repeat only if repetition is necessary for continued progress. Additionally

LEARNING 100 recycles students to lower-level instruction when the student does not master the comprehension objective at the student's instructional level. Once the student exhibits mastery, the management system brings the student back to the proper instructional level for continued instruction.

IMPLEMENTATION

In order to correctly place each student in the **EDL Reading Strategies Software:**

1. Administer the **ENTRY LEVEL LOCATOR TEST** to determine the student's reading rate. Use the prescription guide on the back of the locator test, to place the student in the correct level of reading software.

PRESCRIPTION GUIDE

Part 1

Items	Score
1 to 10	_____
	10

If the Score is less than 8, use *Entry Level Guide AA to CA*
If the Score is 8 or more, use *Entry Level Guide DA to FA*

Part 2

Items	Score
11 to 20	_____
	10

If the Score is less than 8, use *Entry Level Guide DA to FA*
If the Score is 8 or more, use *Entry Level Guide GA to IA*

EDL Learning 100 AA to IA
ENTRY LEVEL LOCATOR TEST

Name _____ Date _____

Session _____ Instructor _____

SAMPLE

Directions:

On the left of each page is a story with blanks where words are missing. On the right you will find four words from which you can choose the correct word to put in the blank. If you are answering in the Test Book, circle the letter of the word in each group that goes on the blank. If you are using the Answer Form, circle the letter of the correct answer on the Answer Form. Look at the examples below.

EXAMPLE

If you are answering in the **Test Book:**

When Maria came home from school, her father was in the street. He was _ 1 _ to a man she did not know. Was everything all right? Could there be trouble at home?

1. a. run b. walk ©talking d. ask

If you are answering on the **Answer form:**

When Maria came home from school, her father was in the street. He was _ 1 _ to a man she did not know. Was everything all right? Could there be trouble at home?

1. a b © d

EDL
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Columbia, SC 29221

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ANSWER KEY FOR ENTRY LEVEL LOCATOR TEST

1.	B.	FAMILY	11.	D.	ATTENDING
2.	D.	STILL	12.	B.	YOUTH
3.	B.	PRESENT	13.	C.	DETERMINED
4.	A.	SEAT	14.	D.	INCREASE
5.	C.	PLANES	15.	A.	INTELLIGENT
6.	B.	ALLOWED	16.	C.	ASSIGNED
7.	A.	DESERVE	17.	B.	AMBITION
8.	A.	COMFORTABLE	18.	B.	BELIEVES
9.	D.	POSSIBLE	19.	A.	ACQUAINTANCE
10.	C.	PROVE	20.	D.	ACCOMPLISH

2. The ***Entry Level Guide*** is then administered in order to select the appropriate Thinking Strategies/Reading Strategies test.
Levels AA-FA correspond to reading levels 1 through 6. The Thinking strategies program starts at level GA (7.0), so students should refer to the Reading Strategies program for instruction at lower levels.

Prescription Guide

Cycles or Lessons	Mastery Level	Score
AA 1-15	13/15	____/15
AA 16-30	13/15	____/15
BA 1-15	18/20	____/20
BA 16-30	18/20	____/20
CA 1-15	22/25	____/25
CA 16-30	22/25	____/25

You will begin working in lessons:_____

The Criterion-Referenced tests for Thinking Strategies/Reading Strategies enable the teacher to evaluate mastery and prescribe instruction in the Thinking Strategies and Reading Strategies lessons.

COMPONENTS

There are three Thinking Strategies/ReadingStrategies tests:

GA 1-20 for Reading Level 7
HA 1-20 for Reading Level 8
I A 1-20 for Reading Level 9

ADMINISTRATION

Selecting the Appropriate Form

3. The students should take the *Criterion-Referenced Test* that corresponds to the level of instruction indicated by the GA-IA Entry Level Guide.

If the Entry Level Guide has not been administered, the teacher can use grade-equivalent scores from standardized tests or Informal Reading Inventories (such as the WRAT Test) in order to select the appropriate Thinking Strategies/Reading Strategies Test.

Grade Equivalent Scores	Reading Strategies Tests
7.0-8.5	GA
8.0-9.5	HA
9.0-10.5	IA

If the students do poorly on the Criterion-Referenced test for level GA, they should be tested at a lower level. Criterion-Referenced Tests are available for the Reading Strategies program at levels AA-FA, corresponding to reading levels 1 through 6. The Thinking Strategies program starts at level GA, so students should refer to the Reading Strategies program for instruction at lower levels.

SCHEDULING

The tests can be administered as either individual or group tests.

The tests for all levels are similar in format and procedure. The teacher can test students on different levels together, if desired.

The tests are not timed and may be given over several sessions if necessary due to time limitations. Altogether, each test should be completed in less than a week; this one-week "deadline"for testing is suggested so that students can begin working as quickly as possible on the necessary Thinking Strategies and Reading Strategies skills.

EDL Learning 100® AA to CA

Entry Level Guide

Sample

Student's Name _____ Date _____

Class _____ Teacher _____ School _____

Prescription Guide

Cycles or Lessons	Mastery Level	Score
AA 1-15	13/15	___/15
AA 16-30	13/15	___/15
BA 1-15	18/20	___/20
BA 16-30	18/20	___/20
CA 1-15	22/25	___/25
CA 16-30	22/25	___/25

You will begin working in lessons _____

ANSWER KEY FOR ENTRY LEVEL GUIDE

AA-1 TO AA-15		AA-16 TO AA-30	
1.	B. BOOKS	16.	B. SHOPPING
2.	C. WINDOW	17.	D. TAKE
3.	A. OUT	18.	A. BACK
4.	D. THIS	19.	C. OLD
5.	B. YOUR	20.	D. LEFT
6.	A. MEET	21.	D. BEGAN
7.	D. FIRST	22.	A. HURRY
8.	C. TOGETHER	23.	B. TELEPHONE
9.	D. NEVER	24.	C. THEIR
10.	B. NEED	25.	D. UNDER
11.	D. NEW	26.	A. ACROSS
12.	A. BETTER	27.	B. TRYING
13.	C. SHOW	28.	C. FAMILY
14.	D. HERE	29.	A. DIRTY
15.	A. STATION	30.	C. FEEL

ANSWER KEY ENTRY LEVEL GUIDE

BA-1 TO BA-15		BA-16 TO BA-30	
1.	C. AUTO	21.	B. GIANT
2.	D. MONTH	22.	C. UNPAINTED
3.	A. FINISH	23.	A. GREEN
4.	B. STRANGE	24.	B. AGE
5.	C. ALMOST	25.	A. QUICKLY
6.	C. HUNDRED	26.	B. SEATED
7.	A. WHEELS	27.	C. SPOKE
8.	D. HIGH	28.	D. USELESS
9.	C. GOLD	29.	A. POCKET
10.	D. SUDDENLY	30.	A. AFFORD
11.	C. NOISE	31.	C. MOUTHS
12.	A. SISTER	32.	D. SUMMER
13.	D. GUN	33.	B. RODE
14.	B. EIGHT	34.	C. FOUND
15.	C. FLOOR	35.	D. WIND
16.	A. THOUGH	36.	C. SPOT
17.	D. FEW	37.	A. CLEAR
18.	C. STOOD	38.	D. PLANTING
19.	B. EACH	39.	B. FIREPLACE
20.	A. WAVED	40.	D. LONELY

ANSWER KEY ENTRY LEVEL GUIDE

CA-1 TO CA-15		CA-16 TO CA-30	
1.	A. TALL	21.	A. CROWDED
2.	C. GROUP	22.	C. BATTLE
3.	D. EXPERIMENTAL	23.	D. COURAGE
4.	B. ENEMY	24.	B. ATTACK
5.	C. FLYING	25.	D. FREE
6.	A. PERSON	26.	B. THOUSAND
7.	D. TERRIBLE	27.	A. CRUEL
8.	D. WRECKING	28.	C. PREVENT
9.	B. WIPING	29.	A. BUILT
10.	D. DELIVERS	30.	B. MATERIAL
11.	C. UNDERSTAND	31.	D. INCH
12.	A. NINE	32.	C. BOTTOM
13.	C. REPORT	33.	A. BLANKETS
14.	A. ORDERS	34.	B. METAL
15.	D. BEGIN	35.	A. PUPPY
16.	B. THREATENING	36.	D. COW
17.	D. BOAT	37.	C. CREAM
18.	A. PRISONER	38.	A. SECRETS
19.	C. STEADY	39.	C. WANDER
20.	B. TOWER	40.	B. IMAGINE

41. B. DIRECTION

42. D. WHEAT

43. B. SEVERAL

44. D. BECAME

45. C. SHADOWS

46. D. TEMPERATURES

47. A. MEDICINES

48. C. HUMAN

49. B. NATION'S

50. D. PRAYER

READING STRATEGIES

ARE

USED

FOR LOWER LEVEL READERS

1.0 - 6.0

EDL Learning 100®

CRITERION-REFERENCED TESTS

EDL READING STRATEGIES

Test Booklet **DA1-20**

SAMPLE

Student Information

Name _____ School _____

Section _____ Teacher _____ Date _____

Scoring Sheet/Prescription Guide
EDL Reading Strategies DA 1-20

Name _____

Date _____ Section _____

Skills Tested	Story				Mastery Level	Your Score	Prescription		
	1	2	3	4			DA	CA	BA
Using Context Clues			61__ 62__ 69__ 73__		3/4	___/4	1	6,21	
Reading for Facts		36__ 37__ 38__ 39__ 40__ 41__ 42__ 43__			6/8	___/8	2	14,25, 27	8
Reading for Main Idea	1__	29__	63__ 71__		3/4	___/4	3	2,8,17	9,16, 27
Predicting Outcomes	9__ 17__	47__ 48__			3/4	___/4	4	11,22 23	11,29
Reading for Supporting Details	2__ 3__ 4__ 5__				3/4	___/4	5	12,17	
Reading for Sequence of Events	19__ 20__ 21__ 22__		76__ 77__ 78__ 79__ 80__	95__ 96__ 97__ 98__	10/13	___/13	6	9,30	5,21
Reading for Cause and Effect	13__ 14__	30__ 31__	57__ 58__ 74__ 75__		6/8	___/8	7,20	5,16, 27	2,18, 21
Making Comparisons				88__ 89__ 90__ 91__ 92__ 93__ 94__	6/7	___/7	8,20	19	26
Summarizing		53__	85__		2/2	___/2	9	26	17
Making Inferences	15__	28__	68__ 72__		3/4	___/4	10,20	3,9	1,6
Understanding Setting		33__ 34__	55__ 56__		3/4	___/4	11	10,30	19
Understanding Character and Feelings	16__ 18__	36__	67__		3/4	___/4	12,20	5,10, 13,20, 27,30	4,6, 14,24
Understanding Plot	23__ 24__ 25__	49__ 50__ 51__	81__ 82__ 83__		7/9	___/9	13	10,30	
Understanding Tone	26__	52__	84__	99__	3/4	___/4	14	1,10, 18	30
Drawing Conclusions		32__ 46__	70__ 86__		3/4	___/4	15		1
Recognizing Methods of Persuasion	6__ 7__ 8__ 12__				3/4	___/4	16	29	
Understanding Author's Message	27__	54__	87__	100__	3/4	___/4	17,20	27,30	8,10
Recognizing Fact and Opinion	10__ 11__	44__ 45__			3/4	___/4	18	28	7,21 23
Understanding Sensory Images			59__ 60__ 64__ 65__ 66__		4/5	___/5	19	4,15, 24	12,20, 28

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THINKING STRATEGIES/READING STRATEGIES

ARE

USED

FOR HIGHER LEVEL READERS

7.0 - 10.0

EDL Learning 100®

CRITERION-REFERENCED TESTS

THINKING STRATEGIES

and

READING STRATEGIES

SAMPLE

Test Booklet

GA 1-20

Student Information

Name _____ School _____

Section _____ Teacher _____ Date _____

EDL Learning 100®

CRITERION-REFERENCED TESTS

THINKING STRATEGIES

and

READING STRATEGIES

SAMPLE

Test Booklet

IA 1-20

Student Information

Name _____ School _____

Section _____ Teacher _____ Date _____

EDL Learning 100®

Thinking Strategies

and

Reading Strategies

EXAMINER'S MANUAL

SAMPLE

Criterion-Referenced Tests

Levels GA–IA

HOW TO USE

EDL LEARNING 100

READING STRATEGIES SOFTWARE

ABOUT THE SOFTWARE PROGRAM

EDL READING STRATEGIES SOFTWARE

The EDL Reading Strategies Program provides instruction in essential comprehension skills presented in story context. Reading Strategies software provides practice and reinforcement of reading comprehension skills, while building vocabulary, spelling and reading fluency. The software can be used independently or, if instruction in reading comprehension skills is needed, along with the Reading Strategies Study Guides and audio cassettes. The none levels of Reading Strategies software, referred to as levels AA through IA, span levels 1.0 through 10.5.

Each lesson is a part of the Learning 100 learning unit called a *cycle of instruction*, and features the vocabulary presented in that cycle.

Each Reading Strategies lesson provides guided instruction, application, and practice in a specific reading comprehension skill.

The skills taught fall into these categories:

Literal Comprehension **Organization**

Interpretation **Evaluation**

In addition, students are introduced to new vocabulary words and given practice in previewing in order to anticipate the selection to be read. The stories are written with a controlled vocabulary, using the EDL Core Vocabulary as the source.

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Each Reading Strategies lesson consists of six parts which may be presented in two lesson sequences.

Sequence A	Sequence B
1. Word Study	1. Word Study
2. Preview	2. Preview
3. Story Reading	3. Skill Instruction
4. Comprehension Check	4. Story Reading
5. Skill Instruction	5. Comprehension Check
6. Skill Practice	6. Skill Practice

Parts 1, 2 and 6 are always in the same position. Parts 3, 4 and 5 may change position, depending upon the skill being taught.

<u>Scheduling:</u> In most situations the total lesson will take about 35 minutes. Skill instruction will take approximately 20 minutes, and Story Reading about 5 minutes. If the total lesson overruns the period length or the student's attention span, the teacher can decide where to break the lesson.

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Teacher Interaction: During the early stages of using Reading Strategies the teacher may wish to work closely wtih students until they are familiar with procedures and confident of their ability to work independently.

Some suitable times for interaction are:

* After the preview.

* After the first exercise in which the skill is applied.

* Before the **COMPREHENSION CHECK**
  (to ensure tht the students have enough grasp of the story content to answer the comprehension questions.)

* After the **COMPREHENSION CHECK.**
  (to help students see where and why they made mistakes in answering the questions.)

* After the **PRACTICE EXERCISE.**

GUIDING PROGRESS:

* When lessons are being completed independently, it is important for the teacher to keep in touch with each student's progress. Ideally, the teacher should meet with the student after the completion of each lesson. Such conferences enable teacher and student to examine together the parts successfully completed and the errors made.

* Often the teacher can help the student to pin point the cause of his/her difficulty with comprehension questions or skill exercises.

The **Progress Chart** in the Study Guide provides a basis on which to evaluate progress over a number of lessons.

Using a microcomputer:

* The student will read the story as it is projected on the computer screen.

* After reading the story the student will complete a comprehension check.

* At the end of each lesson the student's mastery of the comprehension skill of the lesson is checked by a practice exercise, is which the skill is applied in the reading of a new selection.

* **The role of the tutor is:**

  To provide an appropriate role model in the use of personal computers as a learning tool.

  To demonstrate correct usage of personal computers and Learning 100 software.

  To help the student determine an appropriate rate for Controlled Reader training.

  To aid in the evaluation of student work.

  To provide feedback and reteaching activities as needed.

STEP BY STEP INSTRUCTIONS FOR ENTERING THE NETWORK AT PENN STATE'S COMPUTER LABORATORY

TO ENTER THE NETWORK:

1. **TURN ON COMPUTER (switches are located on lower right hand side.)**
2. **COMPUTER WILL DO MEMORY/SYSTEMS CHECK**

3. **YOU WILL SEE A BLUE SCREEN TITLED: Penn State Main Menu**
   Use the arrow keys to move the cursor down to Network or press: N to bring up the network.

4. **THE COMPUTER WILL NOW DO A VIRUS CHECK.**
   PRESS: ENTER

5. **THE NEXT OPTION IS PRINTER SELECT.**
   PRESS: ENTER

6. **YOU ARE NOW ENTERED INTO THE PENN STATE MAIN NETWORK MENU.**
   Use the arrow keys to move the cursor down to INFORMATION MENU or PRESS: I to bring up the Information Menu.

7. **YOU NOW WILL SEE ANOTHER MENU OF SELECTIONS AVAILABLE ON THE NETWORK.**
   Use the arrow keys to move the cursor down to R - EDL Reading Strategies or PRESS: R

8. **YOU ARE NOW IN THE READING STRATEGIES PROGRAM YOUR NEXT STEP WILL BE TO ENTER USER NAME INTO THE BOX AT THE TOP LEFT OF YOUR SCREEN and FOLLOW YOUR STEP-BY-STEP DIRECTIONS FOR USING EDL READING STRATEGIES SOFTWARE.**

STEP BY STEP INSTRUCTIONS FOR USING EDL LEARNING 100 SOFTWARE

1. Turn on monitor and computer - computer will do a systems check.

2. C prompt will be displayed on screen - it will look like this:
   C:\ **TYPE: EDL Press: ENTER**

3. This command will bring up the EDL Program. You will see a picture of the Earth. A small box will be displayed in the upper left hand corner of the screen. This box will ask for **USER NAME**

4. The student should now type in their **FIRST NAME.**

5. A screen will now appear to record user name (first & last).
   TYPE: First Name
   TAB: Tab key will move the cursor through this program.
   TYPE: Last Name
   PRESS: ENTER

6. The screen will now ask you to indicate what level you want to use.
   EA = 5.0 - 6.5 Literacy Level

   GA = 7.0 - 8.5 ABE & Pre-GED Level

   IA = 9.0 - 10.5 GED Level

If you are working at the Connellsville Education Center Computer Laboratory, you will be using the hard drive version of the software. There will only be one level installed on each machine.

If you are working at the Penn State Computer Lab, you will need to select the level that you wish to use.

2. FILL IN THE BLANK: is a cloze exercise using the lesson words. Words are provided either with an example showing how the words are used in a sentence or with a definition. The student them uses the words to complete the cloze exercise.

3. READ THE STORY: provides two methods for reading the story.
Timed Reading: uses the techniques of controlled reading instruction to develop left-to-right fluency. One of the four available options should be used only the first time the story is read.

Read at Your Own Pace: allows each student to read the story as quickly or as slowly as it is necessary for complete comprehension.
This method is used whenever the story is reread.

4. COMPREHENSION CHECK: is an evaluation to determine how well the student understood what they read. A variety of comprehension skills are evaluated in these questions.
A poor score indicates the story was read too quickly and suggests that the reading rate should be slowed.
You select the reading rate (number of words read per minute) when you enter the program.

5. VOCABULARY REVIEW: provides multiple choice questions to reinforce the student's understanding of the words used in the lesson.

Each lesson ends with one of the following three word games to further reinforce the ***Learning 100*** cycle vocabulary:
1. Word Roll
2. Cross Word Puzzle
3. Word Search

<ESC> can be used to quit the program at any point.

The bottom line of the computer screen is devoted to listing the options available at that screen.
At levels DA and above, instructions are provided at the user's option when entering each set of exercises.

STUDENT MANAGEMENT SYSTEM

EDL Reading Strategies Software has a built in Student Management System which allows you to monitor independent student progress at any time.

This permits student's to work independently and enables tutor's to check on their progress through the Learning Cycles.

Included in the Management System is the ability to:

1. **Perform Student file maintenance.**
This program allows the teacher to add student first, last names and to assign a user name and a class for each student.

Included in the program is the ability to:
* check student's score
* look at the previous lesson completed by the student
* look at the next lesson to be completed by the student
* make changes in a student file

2. **Display and print scores.** (Or display and print scores for an individual student.)
3. **Display and print Class roll.**

4. **Delete an entire class when they have completed instruction.**

5. **Rebuild the database.**

6. **Turn the sound on/off.**

7. **Change the password.**

8. **Quit the management program.** (You may quit at any time by using the ESC function key)

STEP-BY-STEP INSTRUCTIONS FOR ENTERING THE STUDENT MANAGEMENT SYSTEM

1. AT THE C:\ PROMPT TYPE: EDL
   PRESS: ENTER

2. YOU WILL SEE THE GLOBE WITH A BOX IN THE UPPER LEFT HAND CORNER ASKING FOR USER NAME.
   TYPE: MANAGER
   PRESS: ENTER

   A BOX WILL APPEAR ASKING FOR THE PASSWORD.
   TYPE: PASS
   PRESS: ENTER

3. THE MENU FOR THE MANAGEMENT SYSTEM WILL APPEAR WITH THE FUNCTIONS AVAILABLE EACH LISTED IN IT'S OWN BOX.

   USE THE ARROW KEYS TO SELECT THE FUNCTION THAT YOU WISH TO USE.

   ACTIVE FUNCTION BOXES WILL APPEAR RED IN COLOR WITH YELLOW LETTERING.

   WHEN THE FUNCTION THAT YOU WISH TO USE IS RED IN COLOR PRESS: ENTER

   THIS WILL ACTIVATE THE FUNCTION THAT YOU HAVE SELECTED TO USE - ADDITIONAL USAGE INSTRUCTIONS WILL APPEAR ACROSS THE BOTTOM OF YOUR SCREEN.

Glossary of

Frequently Used Terminology

and

Definitions of the parts of a computer

GLOSSARY OF FREQUENTLY USED TERMS

ACCELERATOR KEYS - Sometimes called shortcut keys, these are used to activate a command without opening the menu. Usually a function key or a key combination, such as Alt+F12, accelerator keys are displayed next to the menu command. To use an accelerator key, hold down the first key while you press the second key.

ACTIVE DOCUMENT - the document you are currently working in.

APPLICATIONS - computer programs that do specific tasks, such as spreadsheets or word processing.

BIT - the smallest unit of information a computer can handle, the equivalent of one yes-or-no answer.

BYTE - eight bits, the amount of information it takes to represent one character, such as a letter of the alphabet or a number, inside a computer.

CD-ROM - compact disk, read-only memory; a special compact disk for computer data.

CLICK - to move the mouse pointer over an object or icon and press and release the mouse button once without moving the mouse.

CLIPBOARD - a temporary storage area that holds text and graphics. The cut and copy commands put text or graphics on the Clipboard, erasing the Clipboard's previous contents. The paste command copies Clipboard data to a document.

COMMAND - an order that tells the computer what to do. In command-driven programs, you have to press a specific key or type the command to execute it. With menu-driven programs, you select the command from a menu.

CONTROL MENU BOX - a special button located in the upper left corner of a window that contains a special menu that can be used to move, size, and close a window with the keyboard.

CURSOR - a horizontal line that appears below characters. A cursor acts like the tip of your pencil; anything you type appears at the cursor.

DATA - A computer term for information.

DIALOG BOX - a special window or box that appears when the program requires additional information before executing a command.

DOCUMENT - any work you create using an application program and save in a file on a disk.

DOS - disk operating system, the most commonly used operating system for PCs. An essential program that provides the instructions necessary for the computer's parts to function as a unit.

DOS PROMPT - an on-screen prompt that indicates DOS is ready to accept a command. I looks something like C> or C:\>

DOUBLE CLICK - to move the mouse pointer over an object or icon and press and release the mouse button twice in quick succession.

DRAG - click and hold the left mouse button. Drag the mouse to the ending position, and then release the mouse button.

FILE - DOS stores information in files. Anything can be placed in a file: a memo, a budget report, or even a graphics image. Each document you create is stored in its own file. Files always have a file name to identify them.

FLOPPY DISK - small, portable, plastic storage squares that magnetically store data. A removable disk you can insert into your floppy drive. It enables you to transfer software applications or files to your hard drive or vice versa.

FONT - Any set of characters which share the same *typeface* (style or design). Fonts convey the mood and style of a document.

FORMATTING - The process of changing the look of a character (by making it bold, underlined, and slightly bigger, for example) or a paragraph (by centering the paragraph between the margins or by adding an automatic indentation for the first line, for example).

FUNCTION KEYS - the 10 or 12 F keys on the left side of the keyboard or 12 F keys at the top of the keyboard. F keys are numbered F1, F2, F3, and so on. These keys are used to enter various commands.

GIGABYTE - 1 billion bytes, or characters, or 1,000 megabytes of data. GB is the abbreviation.

GRAPHIC - a picture which can be imported into a document to illustrate a particular point.

HARD DISK - a nonremoveable disk drive that stores many megabytes of data. Because it is fixed inside the computer, it performs quicker and more efficiently than a floppy disk

HARDWARE - the physical parts of a computer (such as the *monitor*, the *disk drives*, etc). The programs you run are electronic, rather than physical; they're known as *software*.

KEYBOARD - the main input device for most computers.

KILOBYTE - 1,024 bytes, or characters, abbreviated K or KB.

MAXIMIZE BUTTON - an upward pointing arrow located in the upper right-hand corner of a window that, when clicked on, causes that window to fill the screen.

MEGABYTE - 1 million bytes, or characters, abbreviated MB and sometimes referred to as a "meg." It equals 650 double-spaced typed pages.

MEMORY - Electronic storage area inside the computer, used to temporarily store data or program instructions when the computer is using them. The computer's memory is erased when the power to the computer is turned off.

MENU - a list of commands or instructions displayed on the screen. Menus organize commands and make a program easier to use.

MENU BAR - located at the top of the Program Window, this displays a list of menus which contain the commands you'll use to edit documents.

MINIMIZE BUTTON - a downward pointing arrow located in the upper right-hand corner of a window that, when clicked on, causes that window to be reduced to an icon on your screen.

MONITOR - a television-like screen that lets the computer display information.

MODEM - a machine that enables computers to send and receive data by phone line.

MOUSE - a pointing device that moves an arrow around the screen. When you move the mouse, the pointer on the screen moves in the same direction. Used instead of the keyboard to select and move items, execute commands, and perform other tasks. A mouse gets its mane because it connects to your computer through a long "tail" or cord.

MOUSE PAD - A small square of plastic or foam that the mouse rests on. A mouse pad provides better traction for the mouse.

RANDOM ACCESS MEMORY - (RAM) what your computer uses to temporarily store data and programs. RAM is measured in kilobytes and megabytes. Generally the more RAM a computer has, the more powerful programs it can run.

BIBLIOGRAPHY

Corder, Steve - Ladd, Paula D. - Ruby, Ralph Jr. - Word Perfect in Your Classroom for Windows: A Student Introduction: 1995, J. Weston Walch, Portland, Maine.

Flynn, Jennifer - The Complete Idiot's Guide to Word For Windows: 1993, Alpha Books, 11711 North College Avenue, Carmel, Indiana 46032.

Hutchinson, Sara E. & Sawyer, Stacey C. - Computer Essentials - 1994, Richard D. Irwin Inc. - Publishers, Burr Ridge, Illinois.

Hutchinson, Sarah E. & Coulthard, Glen J. & Sawyer, Stacey C. - Computers and Information Systems 1994/1995 Edition and Computer Essentials: Richard D. Irwin Inc. - Publishers, Burr Ridge, Illinois.

Hutchinson, Sara E. & Sawyer, Stacey C. - Computers The User Perspective: 1992 - Richard D. Irwin Inc. - Publishers, Burr Ridge, Illinois.

Jenkins, Lynn B. & Kirsch, Irwin S. - Adult Literacy in Pennsylvania: Results of the State Adult Literacy Survey - 1994 - Pennsylvania Department of Education, Harrisburg, PA.

Macduff, Nancy - Designing Programs For The Volunteer Sector: 1989 - Macduff/Bunt Associates Walla Walla, WA 99362

Pennsylvania Department of Education - Bureau of Adult Basic and Literacy Education - Section 353 Special Demonstration Projects - Project Abstracts for the Fiscal Year 1993-1994 - State Literacy Resource Centers.

Wojcicki, Thomas P. - ABE Computer Assisted Instruction Project - 353 Final Report - Fiscal Year July 1, 1993 to June 30, 1994.

Zemke, Ron - Computer Literacy Needs Assessment - A Trainer's Guide - 1985 - Addison-Wesley Publishing Co., Inc. - Reading, Mass.